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**Islamic Finance: The Experience of the Sudanese Islamic
Bank in Partnership (*musharakah*) Financing as a Tool for
Rural Development among Small Farmers in Sudan**

by

Saad Abdul Sattar Al-Harran

**A Thesis submitted in partial fulfilment
of the requirements for the degree of
Doctor of Philosophy**

Department of Economics

**The University of Durham
1990**



24 JUL 1990



In the Name of Allah, the Beneficent, the Merciful

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DEDICATION

To my mother who gave me care, compassion and endless love throughout my life, and to my father who sacrificed every thing to show me the light of the day.

ABSTRACT

The Sudanese Islamic Bank has adopted a rural development programme to tackle some of the problems of the Sudanese rural sector. The thesis presents an assessment of the viability and success of the programme with special reference to the small farmers.

The problems encountered in the Sudanese rural sector are extremely difficult and highly complex, including abundant physical resources and a poorly developed economic base. The experience of Sudanese Islamic Bank with the adoption of *musharakah* as the major financing instrument represents a positive example which Islamic banks in Sudan and elsewhere should seek to generalize. It corroborates the viability not only of *musharakah* as a financing instrument, but also of financing operations in the productive sectors of the economy.

One of the major problems with the implementation of the rural development programme in Sudan and elsewhere is that developmental projects are conceived and formulated in virtual disregard of the perceptions of the beneficiaries. This has been especially true in the development of agriculture where superficial temporary measures and uneconomic prestigious projects have been undertaken instead of attempts being made to tackle the main causes of the problems encountered.

The Sudanese Islamic Bank through its rural development programme seeks to avoid the limitations of such projects. It seeks to ensure that its interventions would meet three basic requirements: acceptability, continuity and replicability. Also it wants to demonstrate to other Islamic banks that its experience in *musharakah* financing has proven that such an instrument is economically viable and popular among the poorer sections of the population.

ACKNOWLEDGEMENTS

I would like to thank Allah Almighty who has given me the opportunity to study for higher education.

I wish to thank my supervisor Dr. R. J. A. Wilson, Senior Lecturer and the Chairman of Economics Department at University of Durham for his advice, interest (on the subject of Islamic banking and finance) and helpful discussions throughout the period of this research.

Special thanks go to Professor M.N. Siddiqi and Dr. M. A. Zarqa for their encouragement and suggesting useful references on the subject of Islamic Economics. I would like to thank Dr. Ahmed Mohammed Ali, President of the Islamic Development Bank for his kindness in granting me three years leave of absence and to Dr. Helmi Foudeh, Chief Librarian who and his kind staff were always helpful in sending me any information needed.

My special acknowledgment goes to Dr. M. Fahim Khan, Senior Economist at the Islamic Development Bank, who encouraged me to do the fieldwork on the Sudanese Islamic Bank (SIB), introduced me to the managing director of SIB and made other arrangements on my behalf.

At the Agricultural Bank of Sudan (ABS), my thanks go to the Managing Director, Mrs. A. A. Rehiman, Head of Training Section, Mr. Ali Hassan, Deputy Head and Mrs. Z. Hassan who helped me during the field work. My gratitude goes to ABS staff in Kamelen and Jaili and to the small farmers who were patient in responding the lengthy questionnaire.

I am very grateful for the welcome I received from the Board of Directors of the Sudanese Islamic Bank and specially Mr. M. Osman Khaleefa, General Director of SIB. My thanks and appreciation go to all the staff of the Bank for their kindness and hospitality especially Dr. Badawi B. Osman, Director of Rural Development Department at the Bank, who made my stay comfortable and Mr. Hashim H. Idris who was always kind enough to send me additional information. I am

indebted to the small farmers in Shehenab and Gezira-Islang (where SIB projects were promoted) for their patience and informal talk with me about their problems.

At the University of Durham, my thanks goes to staff of the library and especially those involved with the inter-library loans. I am also indebted to the Computer Unit for the provision of computing facilities and special gratitude goes to Mr. Roger Gawley, Duty Advisor in the Unit for his kindness in helping me prepare the various tables in the thesis.

My thanks also go to Dr. S. Mahmood for his efficient editing of the manuscript. Finally, I am indebted to my wife for her encouragement and patience.

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CHAPTER ONE

INTRODUCTION

The decade beginning with 1970 marked a time of major transformation and reorientation. In the early years of its fifteenth century, beginning in 1970-1980, Islam is in the midst of a new surge of dynamism. In this vigorous reaffirmation, there are elements of both continuity and creativity. This resurgence is the product of developments within modern society and the continuing appeal of the Islamic tradition.

In the twentieth century Muslim countries have faced formidable political and social challenges: the struggle for independence from colonial dominance, the formation and development of independent nation states with all the pressures and problems of modernization. The history of Islam in the modern period reflects the continued interaction of the Islamic tradition with the force of change.

One of the major developments in the Muslim countries in the last two decades was the emergence of Islamic banks. The motivation for the establishment of these institutions comes from a desire of various Muslim communities to formulate and reorganize their social, economic and in particular, financial activities on an interest free basis in view of the divine injunction against interest. Thus, increasing interest has been shown in functioning of the Islamic banking system, especially implications of absence of the interest rate mechanism on the economy and operation of the financial sector.

Islam possesses its own paradigm of economic relations within the context of an Islamic system based on injunctions and norms, derived from the *Quran* and the *Sunnah*. The *shariah* specifies, inter alia, rules that relate to the allocation of resources, property rights, production and consumption, and the distribution of income and wealth¹. The core of the Islamic framework is the mechanism for allocating financial resources, the rate of interest is replaced with the rate of return

¹ Iqbal, Z. and A. Mirakhor, 'Islamic Banking', *Al-Tawhid, A Quarterly Journal of Islamic Thought and Culture*, April- June 1987, p 91.



on real activities. A variety of methods and instruments based on risk and profit-sharing, are discussed in this thesis.

Although the absence of interest is a central characteristic of an Islamic financial system, it is by no means the only one. Without interest, questions arise as to how the system is to be implemented, how it will function, and what will be its economic implications. In what follows, possible answers are provided to some of these questions.

To this end two main points need to be stressed, first, Islam aims at building a socio-economic order based on justice and considers economic activity as means to an end and not an end itself. It enjoins Muslims to harness natural resources, which are a trust from *Allah* for carrying out rightful activities, but abhors exploitation and man made inequalities of income and wealth. Second, Islam is deeply concerned with the problem of economic development, but treats this as an important part of a wider problem, that of total human development. The primary function of Islam is to guide human development on correct lines and in the right direction. It deals with all aspects of economic development but always in the framework of total human development and never in a form divorced from this perspective². That is why the focus, even in the economic sector, is on human development, with the result that economic development remains an integrated and indivisible element of moral and socio-economic development of human society.

The purpose of this thesis is:

First, to explain the basic principles of the *shariah* concerning the elimination of interest from the economy and to analyse the impact of these developments on banking operations.

Second, to demonstrate that the problem with the conventional commercial banking is the nature of an advance. This comprises a fixed return plus a guaranteed return which is not in harmony with the purpose for which the money is being

² Ahmed, K., 'Islam and the Challenge of Economic Development', in *Islam in Transition: Muslim Perspectives*, edited by J. J. Donohue and J. L. Esposito, 1982, pp. 217-222.

sought. The latter involves enterprise for which there can be no certain return. It is suggested in this thesis that the Islamic banking model removes this contradiction and makes the legal nature of the contract in harmony with the nature of the activity.

Third, to argue that a financial system based on an Islamic framework of profit-sharing would be relatively more stable and efficient in allocating resources compared to a traditional interest-based system. We will analyse the framework for the profit-loss-sharing system (*mudarabah*) in more detail.

Fourth, to show that the Islamic banking system based on equity (*musharakah*) is fair and just. If for example a person is interested in keeping the value of his wealth intact he should keep it to himself. But if he wants to make money in a world in which making money is surrounded by many risks he should not avoid the risk and put it wholly on someone else's shoulder. If a risk is shared, then all those who share it are entitled to a return. With the danger of losing part of one's capital comes the hope of gaining more. This hope is confirmed by the experience of the world in which we live. So justice and fairness prevails in the sense that in a single transaction, if an investor wants to gain, he should take the risk of incurring the losses. If funds are advanced for a large number of transactions or a succession of transactions or they are advanced to a diversified clientele then the provider of funds should have nothing to fear. It is expected that, on average, the investor will end up with a gain. This is certainly the case with Islamic banks because they are at the same time (financing new partners) in industry, agriculture and trade. The bank's expect, on balance, to avoid losses because of diversification. We also acquaint ourselves with other modes of financing by Islamic banks which include, beneficial loans (*qard al-hasanah*), deferred payment sale (*bai muajjal*), purchase with deferred delivery (*bai salam*) and leasing (*ijara*).

Fifth, the financial system, including fiscal and monetary policies in an Islamic economy will be examined in detail. At the same time attention will be focussed throughout the thesis on the principal models of Islamic banking. The first model relies on the concept of profit-sharing, and integrates the assets and liability side

based on a principle called the two-tier *mudarabah*. The second model divides the liability side of the bank balance sheet into two windows, one for demand deposits (transactions balances) and the other for investment balances.

Sixth, the main obstacles to Islamic banking and some possible remedies will be examined.

Seventh, there will be a discussion concerning the contribution of agriculture to the Sudanese national economy. We will also analyse the main reasons for economic deterioration and its implications.

Eighth, we will examine analytically the financial institutions in Sudan. The importance of informal credit financing will be assessed since this sector is still playing an important role in the rural areas.

Ninth, the Agricultural Bank of Sudan, its role and significance in rural development will be assessed and the methodology for the case study, and its scope, will be identified.

Tenth, we will examine the Sudanese Islamic Bank, its role and importance in rural development.

Eleventh, the experience of the Sudanese Islamic Bank in *musharakah* financing will be analysed.

Finally, having accomplished the above, general conclusions will be drawn and some recommendations made to assess the overall significance of *musharakah* financing by the Sudanese Islamic Bank in order to formulate policy implications for the future.

1.1. Explanation of the Basic Principles of the Shariah Concerning the Elimination of Interest from the Economy

The prevailing banking and financial system strikes at the very root of the fundamental principle of *shariah* as it tends to promote concentration of wealth in a few hands and breeds inequalities. Interest which is the kingpin of the modern banking and financial system serves as a powerful tool of exploitation of one segment

of society by another.

It has created "haves" and "have-nots", and serves as a barrier to the achievement of maximum welfare for the maximum number of people. It is in this context that Islam forbids interest and it is for the achievement of the egalitarian objectives of Islam that the Muslim world is now embarked on the task of Islamising the financial system by unfettering it from interest.

The chapter will be divided into nine sections. The purpose of this chapter is to first discuss the problem of interest, second to briefly analyse the literature on interest in modern economic theory and third to discuss the problem of prohibiting *riba* in Islam. Fourth, we define *riba*, which is commonly known as interest on all kinds of loans and seems to dominate the Islamic World. Fifth, we also point out the various types of *riba*. Sixth, the difference between *riba* and trade is highlighted and seventh the adverse effects of *riba* on the economy are considered. Eighth, we examine the rationale for the prohibition of interest and finally some conclusions are drawn.

1.1.2. Interest

Even though the stand of Islam on the question of interest appears to be quite unequivocal, the fact is that in the modern economic system in the western world, interest plays a very important role, and it is almost inconceivable that the system could function without the interest component. Interest has been viewed not only as an integral part of the price mechanism whereby savings and investments are regulated in a "laissez fair" system but also as an important policy instrument with which government interventions can influence and control the economy.

From a theoretical standpoint, interest has been a debatable subject among the economic and political theorists. Abu Saud defines "interest as the excess of money paid by the borrower to the lender over and above the principal for the use of the lender's liquid money over a certain period of time"³.

³ Abu Saud, M., 'Money, Interest and Qirad in Islam', *Studies in Islamic Economics*, Leicester, The Islamic Foundation, 1983, p. 64.

Economists have presented different interpretations of interest which are relevant and are mentioned below:

1- Samuelson states that "Interest is the price or rental for the use of money"⁴. Thus he equates the price with the rental use of money considering its service exactly as the service of a medical doctor or of a tractor. As for considering interest as rent for money, the first objection is that every rent comprises an element of depreciation (even in static conditions, i.e. everything being equal). First, money as a means of exchange is not supposed to depreciate, and second when one uses the doctor's or the tractor's service, both of them remain almost intact. You don't rent something that perishes or disappears once you use it. But when you use money once you lose it forever. How can it then be rented.

2- Don Patinkin gives the following more confusing definition: "Interest is one of the forms of income from property, the other forms being dividends, rent and profit"⁵. Here, Patinkin considers interest as a part of the functional share earned by capital goods as those of the functional share earned by capital goods as well as money-capital.

3- J. M. Keynes did not define interest, but mentioned the rate of interest as "Money rate of interest is the percentage of excess of a sum of units of money contracted for forward units of time over the spot or cash price of the sum thus contracted for forward delivery"⁶.

The Islamic, socialist, and a number of capitalist economists have questioned these explanations on both theoretical and technical grounds. They often stress the point that money-capital cannot be treated as capital goods on the same basis as productive factors.

It is pertinent to remark here that lending of money for interest was depreciated, and in most cases prohibited, by all the biblical religions. This prohibition

⁴ Samuelson, P., *Economics*, 10th edition, McGraw Hill, New York, 1976, p. 50.

⁵ Patinkin, D., *Studies in Monetary Economics*, Harper & Row, New York, 1972, p. 118.

⁶ Keynes, J. M., *The General Theory of Employment, Interest and Money*, London, 1936, p. 22.

seemed to be rooted in moral objections to the taking of interest. However, leaving aside consideration of ethics, morality and distributive justice, if we look to various economic theories as they have evolved in the west, we find little agreement with regard to the justification of interest. Added to this basic disagreement on the justification of interest, some prominent economists regard interest to be the main element in trade cycles which hampers the smooth flow of economic activity.

An eminent western economist, Roy Harrod,⁷ regards the abolition of interest as the only way to avert a collapse of capitalism. Not only this; he speaks with great admiration for an interest-less society in his work on Economic Dynamics. Harrod clearly recognizes that “it is not the profit itself, earned by service , by assiduity, by imagination, by courage but the continued interest accruing from the accumulation that makes the profit taker eventually appear parasitical. . .” and categorically states that an interest-less society which will be a “totally new kind of society” would be “the correct and final answer to all that is justly advanced by the critics of capitalism”.

1.2. Interest in Modern Economic Theory

In this section we will briefly analyse the various theories of interest in modern economic theory.

1.2.1. Modern Fructification Theory

Henry George is the founder of this school of thought and this theory bears some resemblance in its basic concepts to Turgot's fructification theory of interest. He justified interest on capital when invested in an industrial, agricultural or commercial enterprise, on the ground that the owner of capital can make it yield a permanent yearly income by buying land with it. The owner will not be inclined to invest his capital in other enterprises unless he can expect just as large a net return as he could obtain through land.

⁷ Harrod, R., *Towards a Dynamic Economics*, London, 1973, pp. 58-81.

1.2.1.1. Criticism

Boehm Bawerk objects to the natural division of capital into a fruitful type and a barren type which, he thinks, is impossible to support. This introduces the same type of error as the physiocrats, who regarded agriculture as the only productive process of production. Besides, George has failed to explain “the original phenomenon of interest by which he claims to explain all subsequent instances of it”⁸. He says that all classes of goods must bear interest. Both corn and cattle for example bear interest. But why do those bear interest? He fails to give any reasonable explanation.

1.2.2. Modified Abstinence Theory

The chief exponent of this theory is Schellwien. His views are similar to Marx’s socialist theory insofar as labour time is regarded as the only yardstick to measure the value of goods. According to him, it is not only the consumability or usefulness of a good, but also the actual consumption of it which exercises the determining influence on its value. The value at which all goods aim is realised only upon consumption.

This, he says, takes place in two kinds of cases. The first of these occurs where a temporary non-consumption of goods is necessary to enable them to enter into consumption at all. Thus, fruit must be allowed a certain period of time for ripening. In so far as such a time interval is necessary between the completion of a product and its consumption, that interval necessarily brings about an enhancement in value⁹.

And according to him, the second kind of case involves those instances in which the production of an article requires that other commodities are not consumed. That applies in any case in which capital is required for production. And since the capital that is being used in production is, to put it simply, withheld from consumption, the commodity must guarantee compensation for such non-consumption, and necessitate a corresponding increase in the value of the commodity.

⁸ Boehm-Bawerk, E., *Capital and Interest, History and Critique of Interest Theories*, Vol. I, Libertarian Press, U.S.A., 1959, p. 339.

⁹ Boehm-Bawerk, op.cit. pp. 341-347.

1.2.2.1. Criticism

Many economists, including Boehm Bawerk, regard this two-fold interpretation of consumption of capital as erroneous, fallacious and ridiculous. They argue that Schellwien takes both positions simultaneously; he regards the capital as consumed for which the buyer must pay its full value and the next moment he regards the same capital as withheld from consumption so that the commodity must also provide compensation for this non-consumption.

1.2.3. The Austrian Theory (The Age or Time-Preference Theory)

According to this theory, interest arises, from a difference in value between present and future goods. Among American economists J. B. Clark, I. Fisher, F. Fetter, N. Palten and S. M. Macvane support this theory. There are many others among English, American, Italian, German, Scandinavian and French economists who can be classified with the above theorists.

The chief exponent of this theory is Boehm Bawerk. The central formula by which Boehm Bawerk claims to give an explanation of the phenomenon of interest is the undervaluation of future goods in relation to the present. "Present goods are" he says, "as a rule, worth more than future goods of like kind and number"¹⁰.

After explaining the cause of interest, which according to him, is the superiority of the present goods over the future goods, he tries to give his reasons why people prefer present goods to future goods. Then he explains the important factors which affect the rate of interest and re-affirms the importance of the capitalistic process of production. Thereafter his conclusion regarding the rate of interest is that it is determined by the marginal productivity of capital in relation to the element of time in production. Thus, infact, he arrives at the same conclusion as the supporters of the Marginal Productivity theory of interest with the only difference that he emphasises the significance of the element of time in production. According to him, the rate of interest is determined by the marginal productivity of capital which diminishes as the period of production is prolonged.

¹⁰ Boehm-Bawerk, op.cit. p. 338.

Boehm Bawerk's theory of interest has been further expanded by K. Wicksell. His important contribution to the theory of interest lies in the emphasis on the relationship between the rate of interest and the price level and the influence of monetary factors in determining the rate of interest.

1.2.3.1. Criticism

In the opinion of Cassel, "this formula of undervaluation of future goods in relation to present" is, however, ambiguous and has, in fact, two different meanings even with Boehm-Bawerk himself.

Boehm Bawerk's analysis of the reasons for the undervaluation of future goods is also insufficient. He gives three such reasons but fails to show how they work together¹¹.

Furthermore, the psychological subjective foundations on which, Boehm Bawerk tries to build his age theory of interest, are completely untrue and unrealistic. In fact a large number of people save for the future without having any consideration whatsoever, for the rate of interest, merely because they consider many of their future needs more important than the present ones. Many people save for future mishaps, accidents, and old age. The majority are likely to save and actually do save, whenever they have the capacity to do so, for the education and training of their children and even for holidays. And all these savings are done without any regard for interest or the premium on savings.

1.2.4. General Criticism of Interest Theories

A critical study of the historical development of the phenomenon of interest has shown that interest is paid to an independent factor of production, which may be called either waiting or postponement or abstinence or use. But all these theories have failed to answer or to prove why interest is paid or should be paid to this factor. Some point to the necessity of waiting; others to the necessity of abstinence or postponement, but none of these explanations answer the question. Neither the mere necessity of waiting or postponement or abstinence nor the mere use or

¹¹ Cassel, G., *The Nature and Necessity of Interest*, London, 1903, p. 62.

productivity of capital is enough to prove that interest is a necessary payment for the employment of capital in production. Besides, these theories have failed to answer how a variable factor can possibly determine a fixed factor like the rate of interest?

Cassel brings in scarcity as a very strong and valid argument for the payment of interest for the services of capital. He argues that the purpose of the price is to check demand and stimulate supply, and therefore the price must be brought up to the level where it causes demand and supply to meet. But the question is still unanswered. Why should interest be paid? It is not a valid argument to say that interest should be paid to capital for its scarcity. It does not explain why this payment should be made to capital and even if it does, the meaning of scarcity is not very clear. Thus it seems obvious that Cassel's theory does not rest on firm theoretical foundations¹².

1.2.5. Modern Theories

Many modern economists such as Wicksell, Hayek, Schumpeter, Keynes and Hicks have attempted to explain the phenomenon of interest with reference to the quantity of money in circulation and the demand for money. Some of them have tried to find the solution to the problem as to how interest is determined by (i) the Indirect Monetary approach. This group of theorists hope to find the answer to the problem of interest by an analysis of the changes in the quantity of money, the velocity of its circulation or in the demand for money. Others have preferred the (ii) Direct Monetary approach method and have tried to explain the rate of interest as a purely monetary problem. Keynes is the modern representative of the second line of approach.

This difference between the approaches of monetary theorists has produced two rival theories. One is the loanable funds theory which is supported by B. Ohlin, Robertson, Hicks and many other economists, while the other is the liquidity preference theory which is supported by Keynes and his followers.

¹² Qureshi, A. I., *Islam and the Theory of Interest*, 1946, Lahore, p. 34.

The main difference between the two approaches to the problem of interest is that the supporters of the former theory hold the view that the rate of interest is determined by the supply of and demand for loanable funds. In contrast the supporters of the latter are of the opinion that the rate of interest is determined by the supply of and demand for money itself.

1.2.5.1. The Loanable Fund Theory

The Loanable Fund theory of interest is based on the thorough analysis of two concepts of saving and investment. In the opinion of the supporters of this theory, the rate of interest is merely the price of credit and is, therefore, determined by the supply and demand for credit.

In other words, the rate of interest, according to this theory, is determined by the supply of and demand for loanable funds. If the demand for loanable funds is in excess of supply, other things being equal, the rate of interest will rise and if it is less than the supply, the rate of interest will fall. The advocates of this theory believe that "the dynamic movement of interest is determined by the excess demand which exists in the loan (money) market"¹³.

The demand for and the supply of loanable funds are influenced by investment opportunities, total savings and bank credit respectively. If investment opportunities resulting from new inventions tend to increase demand for loanable fund more rapidly than the available total savings and credit facilities during any period of time, the rate of interest will rise and vice versa.

1.2.5.2. Liquidity Preference Theory

The importance of liquidity preference in determining the rate of interest is greatly emphasised by Keynes. He says that shifts in liquidity preference can have very significant effects on the rate of interest. While explaining what determined the rate of interest, he pointed out that psychological time-preferences of an individual required two distinct forms of decisions¹⁴.

¹³ Patinkin, O., *Money, Interest and Price*, 2nd ed; New York, 1965, p. 265.

¹⁴ Keynes, J. M., op.cit. p. 166.

The first, concerning the propensity to consume, determines for each individual how much of his income will be consumed and how much will be saved for future consumption.

The second, having made the decision to save, involves deciding in what form savings should be kept. In particular it is necessary to decide whether to keep them in the form of money i.e., liquid assets or in the form of securities. According to Keynes it is the second decision which is important in the theory of interest and not the first one.

Keynes believes “that the mistake in the accepted theories of the rate of interest lies in their attempting to determine the rate of interest from the first of these two constituents of psychological time-preference to the neglect of the second, and it is this neglect which we must endeavour to repair”¹⁵.

Keynes holds that the rate of interest depends upon two things:

- (i) The state of liquidity preference (demand aspect).
- (ii) The quantity of money (supply aspect).

There are in fact several reasons why people will like to keep their wealth in cash. These may be classified according to their motive as:

- (a) The transaction-motive, i.e., money required for personal and business exchange;
- (b) The precautionary motive, i.e., money required for unforeseen contingencies and future security; and
- (c) The speculative-motive, i.e., trying to profit from price movements in the securities market.

The demand for cash for the first two motives is almost stable and mainly it is the third motive, i.e., the speculative motive, which, owing to the uncertainty of the future, is likely to require a larger quantity of cash. Therefore, in general, as

¹⁵ Keynes, op.cit. p. 167.

the liquidity preference for the speculative motive weakens, the rate of interest falls and vice versa.

It may, however, be pointed out that liquidity preference changes in accordance with the changes in attitudes of the people towards the economic and political future. Thus it seems that the rate of interest is dependent upon factors which are highly psychological in nature. Further, the so-called psychological factors are themselves conditioned by more objective events in the economic and political arena: and may even be influenced by the conventional factors.

In brief, interest rate is a price which fluctuates according to the supply and demand for money. The supply is fixed by the banking system and the demand is determined by the preference for holding cash. As long as the supply remains fixed, the price or rate (of interest), varies with the demand for money¹⁶.

1.2.5.3. Stock and Flows Theory

It is, in fact, an attempt at co-ordination between “real” and “monetary” approaches in the theory of rate of interest. It is argued that both, real and monetary factors, have to be taken into account in a complete theory of the rate of interest.

Scitovszky is the chief exponent of this group. Swedish economist E. Lundberg and Hayek also hold similar views about the co-ordination of the “real” and “monetary” approaches to the problem of interest¹⁷. These attempts have not been successful in achieving their objectives. In addition to the confusion between stocks and flows, they suffer from the inadequacy of the partial equilibrium analysis.

1.2.6. Criticism of Liquidity Preference Theory

According to Robertson, interest in liquidity preference theory is reduced to nothing more than a risk-premium against fluctuations about which we are not certain. He also condemns Keynes view that “interest is not reward of not-spending

¹⁶ Dillard, D., *The Economics of John Maynard Keynes, Theory of a Monetary Economy*, Crosby Lockwood & Son, London, 1950, pp. 164-180.

¹⁷ Patinkin, op.cit. pp. 375-380.

but reward of not hoarding"¹⁸.

Harrod does not like another point in this theory. Keynes insists that interest is solely the reward for waiting. This undue insistence, according to Robertson, appears to be one-sided and not very successful for Keynes' case.

1.2.7. Criticism of Monetary Theories

The monetary theories, like marginal productivity theories, have made no attempt to answer the question, why should interest be paid? or why interest is paid? They have simply ignored this question and have sought refuge in the theory of value. They say that like any other commodity, the price of capital is determined by the demand for and supply of money.

But it seems that they have forgotten the basic difference between the two problems: the theory of value is a problem of exchange, while the theory of interest is a problem of distribution. Both loanable funds and liquidity preference theories are basically supply and demand theories of interest and explain it with reference to the supply and demand for loanable funds and money respectively. But they do not give any justification for the phenomenon of interest.

According to Boehm Bawerk, the study of all these theories "reveals the development of three essentially divergent basic conceptions of the interest problem". One group, the representatives of the productivity theory, treats the interest problem as a problem of production. The Socialist exponents of the exploitation theories treat the interest problem as purely a problem of distribution, while the third group, the supporters of the monetary theories, seeks in the theory of interest, the problem of value¹⁹.

There is no doubt that all these theorists, have been confused by the very magnitude of the phenomenon of interest, and have avoided the main issue as to why interest should be paid? They have, indeed, spent all their energies in solving the problem either of waiting or abstinence or productivity or "labour value" or

¹⁸ Robertson, D., *Essay in Monetary Theory*, London, 1946, p. 25.

¹⁹ Boehm Bawerk, *op.cit.* pp. 348-354.

“the determination of value” and have not said anything about the origin or the justification of the institution of interest.

1.3. Prohibition of Riba (Interest or Usury) in Islam

The modern banking system is organized on the basis of a fixed payment called interest. When the entrepreneurs borrow money from the commercial banks they have to promise to return the principal amount along with an additional payment (interest) worked out on the basis of a fixed rate. Hence after the term of loan expires, the bank usually gets back the amount lent along with the interest payment. It does not matter whether the entrepreneur made a profit or incurred a loss. To the entrepreneur, interest paid to the bank becomes an item of cost which is included in the price of the commodity ultimately paid for by the final consumer. The depositors also get interest on their deposits though at different and definitely lower rates. Thus the bank gets monetary resources at lower rates of interest and advances them to borrowers at higher rates. The difference between them is what constitutes a bank's income. In a market economy, the banks are profit-making institutions. They need to maximize their profit by advancing the money at a higher rate than the rate at which they get it. Thus borrowing and lending of money takes place at a price called the interest rate, which is the pivotal point of all banking activity.

These practices of the modern commercial banking system are in conflict with the principles of Islam which strictly prohibit *riba* (interest or usury). Islam is opposed to exploitation in every form and stands for fair and equitable dealings among all men. To charge interest from someone who is constrained to borrow to meet his essential consumption requirements is considered an exploitative practice in Islam. Charging of interest on loans taken for productive purposes is also prohibited because it is not an equitable form of transaction²⁰.

1.4. The Meaning of Riba

The prohibition of *riba* is ordained in Islam by verses in the *Holy Quran* as well

²⁰ Ahmed, Z., 'Prohibition of Interest in Islam', *Journal of Islamic Banking & Finance*, Karachi, Pakistan, Vol. 1, No. 1, 1984, p. 20.

as the sayings of the *Holy Prophet Muhammad* (peace be upon him). *Riba* literally means increase, addition, expansion or growth. It is, however, not every increase or growth which has been prohibited by Islam. In the *shariah*, *riba* technically refers to the “premium” that must be paid by the borrower to the lender along with the principal amount as a condition for the loan or for an extension in its maturity. In this sense, *riba* has the same meaning and import as interest in accordance with the consensus of all the jurists without any exception. The *Holy Quran* instructs the people to shun *riba* and administers a stern warning to those who do not abide by the Divine injunctions in this regards. The *Holy Quran* says:

“Those who swallow riba can not rise up save as he ariseth whom the devil hath prostrated by (his) touch. That is because they say : Trade is just like riba, whereas Allah permitteth trading and forbiddeth riba. He unto whom an admonition from his Lord cometh, and(he) refraineth(in obedience thereto), he shall keep that which is past, and his affair henceforth is with Allah. As for him who returneth(to riba) such are rightful owners of the fire. They will abide therein. Allah hath blighteth riba and made sadaqat fruitful. Allah loveth not the impious and guilty”.(II:272-276)

“O ye who believe, observe your duty to Allah and give up what remaineth (due to you) from riba, if you are (in truth) believers. And if ye do not, then be warned of war (against you) from Allah and His Messenger. And if ye repent then ye have your principal. Wrong not, and ye shall not be wronged”. (II:278-279)

This verse of the *Holy Quran* makes it absolutely clear that the institution of interest can never be tolerated in an Islamic economy. Moreover, the prohibition of *riba* appears in the *Quran* in four different revelations. The first of these, in *Mecca*, emphasised that while interest deprived one of the wealth of *Allah*’s blessings,

charity raised it many times²¹. The second, in the early *Medina* period, severely disapproved of interest. It placed those who took *riba* in juxtaposition with those who wrongfully appropriated other people's property and threatened both with severe punishment from *Allah*. The third revelation, around the second or third year after *Hijra*, enjoined Muslims to keep away from *riba* if they desired their own welfare (in the comprehensive Islamic sense). The fourth revelation, near the completion of the *Prophet's* mission, severely censured those who take *riba*, established a clear distinction between trade and *riba*, and required Muslims to annul all outstanding *riba*, instructing them to take only the principal amount, and forego even this in case of the borrower's hardship.

1.5. Types of Riba

Islamic jurists have classified *riba* in two types:

1. *Riba al-nasia* (Interest in debt)

The term *nasia* means to postpone, defer, or wait, and refers to the time that is allowed to the borrower to repay the loan in return for the "addition" or the "premium". Hence *riba-al-nasia* refers to the interest on loans.

The prohibition of *riba al-nasia* essentially implies that the fixing in advance of a positive return on a loan as a reward for waiting is not permitted by the *shariah*. It makes no difference whether the return is a fixed or a variable per cent of the principal, or an absolute amount to be paid in advance or on maturity, or a gift or service to be received as a condition for the loan. The point in question is the pre-determined positiveness of the return. It is important to note that, according to the *shariah*, the waiting involved in the repayment of a loan does not by itself justify a positive reward. Therefore, the nature of the prohibition is strict, absolute and unambiguous.

2. *Riba al-fadl* (Interest in barter)

Islam, however, wishes to eliminate not merely the exploitation that is

²¹ Chapra, M. U., 'The Nature of Riba in Islam', *Hamdard Islamicus*, Pakistan, Vol. VII. No.1. 1984, p. 4.

intrinsic in the institution of interest, but also that which is inherent in all forms of unjust exchanges in business transactions.

Riba al-fadl is the excess over and above the loan paid in kind; it lies in the payment of an addition by the debtor to the creditor in exchange of commodities of the same kind. The following tradition of the *Prophet Muhammad* is cited as evidence thereof

It is related that *Abu Said al-Khudri* said:

"The Prophet Muhammad (peace be on him), has said that gold in return for gold, silver in return for silver, wheat in return for wheat, barley in return for barley, dates in return for dates and salt in return for salt, can be traded if and only if they are in the same quantity and that it should be hand to hand. If someone gives more or takes, then he is engaged in riba and accordingly has committed a sin".

There is disagreement among jurists as to whether the injunction applies only to the six commodities mentioned above or whether there is some general principle which emerges covering a whole class of commodities. Since this kind of *riba* is not our concern we will not discuss these differences here.

To sum up, *riba al-nasia* and *riba al-fadl* are both essential counterparts of the verse "*God has allowed trade and prohibited riba*" (II:275). While *riba al-nasia* relates to loans and is prohibited in the second part of the verse, *riba al-fadl* relates to trade and is implied in the first part²². Because trade is allowed in principle, it does not mean that everything is allowed in trade. Since the injustice inflicted through *riba* may also be perpetuated through business transactions, *riba al-fadl* refers to all such injustices or exploitation. While *riba al-nasia* can be defined in a few words, *riba al-fadl* encompassing a vast array of business transactions, is not so easy to specify.

²² Chapra, op.cit. p. 8.

1.6. Difference Between Interest and Trade

It is necessary to explain the reasons which actuated Islam in forbidding interest and permitting trade. Islam in making trade lawful and interest unlawful, stipulates that there are fundamental difference between them. It is on the basis of these that the two cannot be treated on a par, from the economic and the moral point of view.

(1) In trade the purchaser and the vendor exchange on the basis of equality. For the purchaser derives profit from that which he has purchased from the vendor, while the latter gets profit in consideration of the labour and time which he spent in procuring that commodity for the purchaser. Compared with this, in interest transactions there is no division of profits between the two parties on the basis of equality. The creditor gets for himself a definite amount of money for his loan but all that the debtor is certain of is the time to use the money. During this time period it is not always possible to make a profit. If borrowing is for domestic needs, then certainly there is no possibility of any profit accruing over the time period of the loan. If the borrower has obtained the financing with a view to invest in some business, he stands some chance of producing a profit. The result is that one of the two parties to the interest transaction gets profit "certainly" while there is no certainty of profit in the case of the other²³.

(2) From the point of view of trade, the moment a commodity is exchanged for its price, the transaction comes to an end. The purchaser does not give anything after that transaction to the vendor. In their transaction whether of houses, land, or other material, the original remains intact and is returned to the owner afterwards. It is only for the use of it that the hirer has to pay rent to the owner. But in the case of interest, the debtor actually spends the amount borrowed from the creditor and has to return the same amount with an addition by way of interest.

Looked at from the economic point of view, the difference existing be-

²³ Qureshi, op.cit. p. 98.

tween trade and interest becomes of fundamental importance. This gives an enormous power to trade as one of the dominant factors in economic progress and the creation of a great civilisation. Interest becomes, on the other hand, one of the disruptive forces from the point of view of society. Again from the ethical point of view, interest creates in man the undesirable weaknesses of miserliness, selfishness, lack of sympathy, and worship of money. It uproots the very foundation of humanity and mutual help. Thus, both from the economic and ethical points of view, interest is one of the leading causes of ruin for mankind²⁴.

1.7. Adverse Effects of Riba

The prevailing system of financial relationships based on the fixing of return in the form of interest is the cause of all inequities and serves as a powerful tool of exploitation in society. Because it is unfair both to the user and the provider of funds, it hampers the process of capital formation and optimal utilisation of resources, both physical and human.

To illustrate, let us examine the impact of interest on the investor. The starting point here is that a firm will undertake an investment programme provided it can borrow money at an interest rate lower than the prospective yield on the project. While various modifications are required, the fact remains that no project on which the prospective yield is less than the interest rate will be undertaken if the firm must borrow to finance it. But in fact conditions are far more stringent²⁵.

For one thing, an allowance would be made for risk in this context, that is, for the risk that the estimate of yield is incorrect. Bearing in mind the common business rule that the purchase of a capital asset is undertaken only when there is a reasonable assurance that its cost will be fully recovered in a period far shorter than its life, it is clear that the allowance for risk is frequently very high, perhaps a multiple of the interest rate. Then there is the further risk to be considered which the management understandably deems very important, the enhanced danger

²⁴ Qureshi, op.cit. p. 1.

²⁵ Sheikh, M. A., 'Interest and Unemployment', *Islamic Studies*, Islamabad, Vol. VIII, March 1969, No.1, pp. 9-46.

of bankruptcy with every increase in the firm's debt. Considering this risk too, management may require an anticipated rate of return far above the interest rate as a compensation.

Every rate of interest projects several risks in the mind of the investor which have a direct relationship with the rate at which he can borrow money. These risks have often been lumped together as the risk of enterprise. We have to add the borrower's risk which is concerned with the assurance to be able to pay interest on the borrowed sum. None of these risks will be counted at a rate lower than the rate of interest because it is the rate of interest that sets the pace for both the rewards we seek in our venture and the risks we run in our undertakings. Interest then is inversely related with investment decisions and so long as interest dominates an economy, unemployment must persist.

Ever since the end of the second world war most governments have been concerned with creating jobs to reduce unemployment. But the result is something very different from the one anticipated. As governments pushed ahead with the creation of jobs the price level started rising. A race developed between wages and prices which threatened to disrupt the entire monetary system. There is no remedy to it except to raise the rate of interest to undo the process of the forced creation of jobs; so that, unemployment increases and governments again start on the vicious circle beginning with the creation of jobs²⁶.

We do not have enough space here to trace all the influences of interest, such as those on profit, rent, prices, wages, capital formation etc. but we can say in short, that the interest-based financial system has failed to resolve the socio-economic problems. A substitute must be found to save the economic system from the ill-effects of interest.

²⁶ Ahmed, S. M., 'Banking in Islam', *Journal of Islamic Banking and Finance*, Karachi, Pakistan, Vol.2, No.2. June 1985, p. 23.

1.8. Rationale of the Prohibition of Interest

Next let us look at the rationale of prohibition of interest in Islam. This has to be viewed in the context of the basic characteristics of an Islamic economic system. The fundamentals of an Islamic economic system may be enumerated as follows:-

- (a) All persons should have at least the minimum needed for subsistence;
- (b) Undue concentration of wealth in a few hands should be prevented;
- (c) Hoarding should be discouraged and the use of wealth for productive purposes should be encouraged;
- (c) The economic system should function so that there is no room for idlers; in other words, reward should accrue solely as a result of the expending of efforts, except in the case of naturally handicapped and involuntarily unemployed.

The delineation in the *Holy Quran* of the practice of interest as an act of “war with *Allah* and his messenger” provides a clue to the philosophy behind the prohibition of interest in Islam. It is a clear pointer that the institution of interest is something which runs counter to the scheme of things which Islam stands for and which *Allah* wants to see established on earth. That the words “*Allah has blighted riba and made sadaqat fruitful*” occur in verse 276 of *Surah Al-Baqara* also point towards the fact that the practice of interest militates against the objectives of an Islamic society while *sadaqat* promote these objectives²⁷.

The main points of the rationale for prohibition of interest in Muslim countries may be listed as follows:

(1) Transactions based on interest violate the equity aspect of economic organisation. The borrower is obliged to pay a pre-determined rate of interest on the sum borrowed even though he may have incurred a loss. To insist on payment

²⁷ Ahmed, Z., *Concept and Models of Islamic Banking: An Assessment*, Paper presented at the Seminar on Islamization of Banking under the auspices of Institute of Bankers in Pakistan, Karachi, November 1984, p. 5.

of a pre-determined rate of interest irrespective of the economic circumstances of the borrowers of money is against the Islamic norm of justice.

(2) The interest based system discourages innovation, particularly on the part of small scale enterprises. Large industrial firms and big landholders can afford to experiment with new techniques of production as they have reserves of their own to fall back upon in case the adoption of new practices does not yield a good dividend. Small scale enterprises hesitate to go in for new methods of production with the help of money borrowed from banks as the liability of the banks for the principal sum and interest has to be met irrespective of the results while they have very little reserves of their own.

(3) Under the interest based system, banks are only interested in recovering their capital along with the interest. Their interest in the ventures they finance is therefore strictly limited to satisfying themselves about the viability and profitability of such ventures from the point of view of the safety of their capital and the ability of the venture to generate a cash flow which can meet the interest liability²⁸. Since the return the banks get on the capital sum lent by them is fixed and does not vary with the actual profits of the ventures to whom they lend, there is no incentive for the banks to give priority to ventures with the highest profit potential.

(4) The interest based system dampens investment activity because it adds to the costs of investment. If interest rates are raised to contain monetary demand in situations where excessive fiscal deficits are fuelling inflation, private investment receives a severe set-back leading to "stagflation". This has actually been the experience of a number of developed countries in recent years.

(5) The interest-based system is security oriented rather than growth oriented. Because of the commitment to pay a pre-determined rate of interest to depositors, banks in their lending operations are mostly concerned about the safe return of the principal lent alongwith the stipulated interest. This leads them to confine their lending to the already well established big business houses or such

²⁸ Ahmed, Z., op.cit. p. 7.

parties as are in a position to pledge sufficient security. If they find that such avenues of lending are not sufficient to absorb all their investible resources, they prefer to invest in government securities with a guaranteed return. This exaggerated security orientation acts as a great impediment to growth because it does not allow a smooth flow of bank resources to a large number of potential entrepreneurs who can add to gross national product by their productive endeavour, but do not possess sufficient security to pledge to the banks to satisfy their criteria of creditworthiness.

1.9. Conclusions

As we noted earlier, the principal reason why the *Quran* has delivered such a harsh verdict against interest is that Islam wishes to establish an economic system where all forms of exploitation are eliminated. It is concerned in particular with the injustice perpetuated when a financier is assured of a positive return without doing any work or sharing in the risk, while the entrepreneur, in spite of his management and hard work, is not assured of such a positive return. Islam wishes to establish justice between the financier and the entrepreneur.

Under these circumstances it is difficult to see how anyone could justify interest in an Islamic society. The difficulty in understanding the prohibition comes from a lack of appreciation of the whole complex of Islamic values and particularly its emphasis on equity not equality. Private property rights are respected through the inheritance laws. Justice is equated with morality, and it is in the interest of justice, not equality, that *riba* must be prohibited.

CHAPTER TWO

PROBLEM OF DEBT FINANCING AND ISLAMIC VIEWS ON THE SUBJECT

Introduction

The purpose of this chapter is to examine problems of debt financing and consider Islamic views on the subject. The chapter is divided into five sections and at the end of each section the Islamic opinion is outlined on the questions being examined. First, we discuss government debt, second, private sector debt, third, external debt, fourth, debt financing from the firm's point of view and finally draw some conclusions.

Government debt consists of two parts. Internal debt (which, we also refer to as the public debt) and the external debt. Public debt is the debt owed by the citizens of a country in a collective capacity (i.e. as the government) to themselves in their individual capacities. This is quite distinct from the debt owed by the government to citizens and governments outside its jurisdiction. The term "national debt", it is often suggested, should be reserved for this other category of debts.

What should be regarded as constituting the public debt has been a debatable point on which there has been no consensus of opinion. Attempts have been made, for example, to define public debt by the structure of ownership. Thus Professor Earl R. Rolph referred to government debt as "national debt" held outside official agencies, or in other words that debt held in private hands otherwise known as the net debt, the publicly-held debt, or outstanding debt¹. He stressed that an exchange of assets between the treasury on the one hand and a government corporation or the central bank on the other is merely "a book keeping arrangement"² and should therefore not be regarded as giving rise to a debt obligation of any significance for economic analysis.

¹ Rolph, E. R., 'Debt Management: Some Theoretical Aspects', *Public Finance*, Vol. 16, 1961. pp. 105-6.

² Rolph, E. R., 'The Principles of Debt Management', *American Economic Review*, Vol. XLVII. June 1957, p. 305.

Studies in the areas of debt policies and the principles and techniques of debt management have been devoted largely (and perhaps inevitably) to debt policies and management in developed countries. Consequently, like most other fields in economics, debt theories have developed largely against the background of these economies and generally towards the achievement of economic policy goals which are of special interest to them. The background and structure of underdeveloped economies differs widely from those of the developed economies. Similarly, although it has been argued that economic policy goals in both developed and underdeveloped countries are basically similar,³ the priority orderings and emphasis are certainly different⁴.

The existence and adequate development of economic institutions and the appropriate orientation and responsiveness of economic behaviour within the economy are basic requirements for the use of economic policy instruments. That these features of underdeveloped economies tend to differ considerably from those in the developed economies, results almost always in serious limitations on the effectiveness of economic policy instruments in the former. Similarly, these differences often condition the appropriateness and/or the mode of application of particular instruments of policy for specific goals in ways quite different from the latter. In particular, the path of growth of the public debt, the pattern of impact it has on the economy, and its usefulness as an instrument of economic policy in developing countries, depends very much on the existence and stage of development of the co-operant factors and institutions.

2.1. General Characteristics of Public Debts

Public debts are incurred through public loans, which may be classified in various ways. In the first place, a loan may be either voluntary or compulsory. The chief advantage of a voluntary loan, as compared with a tax, is that different lenders

³ Heller, W., 'Fiscal Policies for Underdeveloped Countries', in *Readings in Taxation in Developing Countries*, R. M. Bird & Oldman, O. (eds.), (Baltimore: John Hopkins Press, 1967), pp. 5-6.

⁴ Chelliah, R. J., *Fiscal Policy in Underdeveloped Countries*, (London: George Allen & Unwin Ltd., 2nd ed., 1969), pp. 19-20.

are free, according to their circumstances and inclinations, to subscribe as much or as little as they please. But this disadvantage is lacking in a forced loan, which must be compulsorily subscribed on the same basis as a tax. The chief advantage of a tax, as compared with a voluntary loan, is that it leaves behind it no trail of charges for interest and repayment of principal. But this advantage is lacking in a forced loan, though the rate of interest on the latter may be lower than on a voluntary loan.

In the second place, the conventional two way classification into short and long term debts, therefore, appears to rest on an attempt to distinguish between these highly liquid instruments and less liquid ones. Treasury bills are usually taken as typifying short term securities. These can in fact be taken to be the most liquid of government debt instruments. This is because: (i) they are usually issued for 91 days or less during which time the risk of serious depreciation in the value of money is likely to be minimal; (ii) they can be sold easily on the market without any undue risk of loss; (iii) they are readily acceptable to the banks at face value as security for loans because of their "near money" nature and (iv) they are discountable at the central bank.

Within this liquidity framework, the medium term debts can also be subsumed into the two way classification. Thus, in so far as medium instruments do not have the features of liquidity given above, it will appear that the proper place for them is with the long term instruments. However, occasionally, medium term instruments are issued subject to conditions of easy discountability similar to the case of the short term instruments. In that case, the liquidity character of such medium instruments becomes so enhanced so as to qualify them for inclusion in the short term category.

2.1.1. Economic Effects of Public Debt

The character of the expenditure for which debt is incurred will determine whether the effect is (a) employment-creating, (b) utility-creating, or (c) efficiency-creating, or some combination of these. The character of the expenditure will affect the standard of living. But once the debt has been incurred, its subsequent impact upon employment and the distribution of income will be the same regardless of the purpose for which the debt was incurred.

We now encounter the question of whether a public debt imposes any such serious rigidity upon the economy. A. H. Hansen, believes that it does not. The interest on the public debt is serviced by taxation, the successful collection of which depends upon the maintenance or increase from the long-run standpoint of the national income as a whole. The solvency of the government is not subject to the risk of structural changes which may cause the decline, or even death, of certain industries and thus profoundly affect the income of private corporations. Moreover, the cyclical fluctuations of income are less serious for the government than for the private sector of the economy. In the first place, the incomes of many private corporations fluctuate far more violently than the income of the economy as a whole. Much more important, however, is the fact that the individual corporation with a low income in the depression phase of the cycle is placed in a dangerous financial situation. Corporations with a heavy load of debt may, in seriously depressed conditions, be forced into bankruptcy and may be unable to carry the interest burden, or at any rate be unable to raise necessary new funds for expansion in the subsequent revival period⁵. The government is placed in no such dangerous situation by reason of cyclical fluctuations of income. Indeed, the government is not only able to, but may, to the advantage of the economy as a whole, engage in borrowing when the national income is temporarily low.

⁵ Hansen, A. H., *Fiscal Policy and Business Cycles*, George Allen & Unwin Ltd, London, 1941, pp. 135-185.

2.1.2. The Role of the Central Bank in Dealing with Public Debts

The central bank stands in a unique position vis-a-vis other arms of the government with respect to dealings in public debt. This is not only because, the bank is responsible for the management of the government debt but also because of its note issuing function. The bank does not have to be in custody of private sector funds or unutilised budgetary allocations to enable it to invest in government securities. It can buy securities by simply issuing new notes or creating deposits for the government and the extent to which it can do this is only limited by whatever legal or other institutional limitation is placed on the volume of currency it can issue. It follows that the capacity of the bank to invest in government securities can be influenced by varying its note-issuing capacity.

Being responsible for the management of the public debt the bank usually acts as a buffer between the treasury and the securities market. When a new issue is floated, it is customary for the bank to take up whatever part of the new issue that is not fully subscribed to by the public. But these amounts taken up by the bank are peddled through the market as soon as possible afterwards. The implication here is that the money supply is temporarily increased as the bank takes up unsubscribed issues but the resulting increase in the money supply is withdrawn as soon as possible after market sale.

This would not matter very much where the market for securities is well developed and demand for them is high enough to absorb whatever excess the bank takes on, either at the time of issue, or within a short time after it. In economies where the securities market is not at an advanced stage of development and demand for securities from the general public is low, the bank might find it difficult to sell much of the new issue it has taken up. This means that for every successive issue of a new security by the government, the bank's holding will tend to increase. The bank's support to the government under these circumstances is inflationary. In addition, it might tend to indicate the weakness of open market operations as a tool of monetary control.

It might be useful to look at holding of debt by the bank from the point of view of resource withdrawal from the private sector. Money supply increases when the bank purchases government securities and decreases when its holding of securities falls. When the bank sells to the private sector, monetary resources are thereby withdrawn from the private sector and when it purchases from this sector, monetary resources in the private sector correspondingly increase. If the bank purchases directly from the treasury it enables the government to withdraw real resources from the private sector through its purchases of goods and services. Consequently, either way, the bank's holding of debt has important implications for the variation of resources in the private sector.

2.1.3. The Government Role in Minimising the Budgetary Burden of Debt

This is perhaps a good point to turn to an examination of the budgetary burden of public debt. The problem falls into two parts, the amortization of the debt, and the cost of borrowing especially as typified by interest payments. To a considerable extent the use of debt finance is criticised on the ground of the alleged necessity for an increase in tax to amortize and/or pay interest on the debt.

It is a fact that a tremendous growth in the debt of most advanced countries had been caused by financing of war. Expenditure on war neither yields returns to the government nor generates growth from which government revenue can benefit. One does get a slightly different picture, however, when one considers debt finance in times of peace. The government can also incur debt in anticipation of tax revenue, or to finance capital projects or on behalf of government corporations. Repayment of such debts will surely not create a budgetary burden of the same magnitude as debts incurred to finance a war.

For example, if a capital project financed by debt aids economic activities, e.g. road construction, electricity, etc., its effect would be reflected in increased tax revenue. Only to the extent that the induced increase in tax revenue falls short of the debt and interest payable, do repayments constitute a budgetary burden.

However, a debt management problem arises as to the desirable liquidity struc-

ture of the economy or the financial strength of the government to meet its obligations when such debts fall due for repayment. Thus, if debts become due at a time when the government is attempting to reduce liquidity of the economy, or when, as a result of the demands of other essential programmes for expenditure, it has to mobilise all possible resources, the best way out would be to find a way of converting the maturing debt into a longer one. This conversion can be done in one of two ways. The holders can be induced to exchange the expiring debt for conversion issues bearing higher yields. Alternatively, the process of continuous borrowing can be adopted. This involves the government raising new debts to pay off the maturing ones. The new debts raised can be longer or shorter depending on the reason why the government is not paying maturing debts without raising new ones.

The cost of public debt falls into two broad categories, administrative costs and interest payments. Administrative costs are incurred in issuing, retiring, and paying interest on debt instruments. A few suggestions have been proposed as to how these costs can be reduced. Important among them is the number of debt instruments the government uses. Reduction in the number of instruments used makes for considerable simplification which would save the government the expenses incurred in putting several types on the market and the multiplicity of records necessitated by the use of numerous types of instruments. An extreme view was proposed by Simons,⁶ that government borrowing should in fact be made on a long-term basis only.

Turning now to the problem of interest cost, the relatively low rate of interest at which short-term debts can be raised vis-a-vis long ones might tempt one to suggest that the government should concentrate on the use of short term securities. But, considering the implications of short-term borrowing for the liquidity of the economy and monetary control, it is clear that the disadvantage will occasionally outweigh the advantage of lower interest rates. Besides, the rate of interest on short-term borrowing is not likely to be the same at all times. It will tend to rise

⁶ Simons, H., 'On Debt Policy', *Journal of Political Economy*, Vol. 52, December 1944, pp. 356-361.

with an inflationary trend and might well rise above what the government needs to bear on long-term borrowings contracted during non-inflationary periods.

While discussing the use of long or short borrowing as a means of reducing interest payments, it might be useful to examine yet another extreme possibility, that of monetary expansion, since the government owns and controls the machinery for printing money⁷. There is the temptation to uphold this argument on a few grounds.

Firstly, it can be argued that taking up of government securities by the central bank merely cloaks money printing. Thus the government should print money directly rather than burden itself with interest commitment and administrative costs by employing an intermediary. Secondly, short-term securities are as good as money and serve, in the hands of banks, as a basis for credit expansion just as cash does. If the government needs money or wishes to increase liquidity it could just as well print the money necessary. Thirdly, the government does not pay interest on printed money whereas it has to on loans raised.

On a close examination, however, it would be realised that attempting to avoid interest payments by printing money would only result in bigger problems. A first argument against this is that the ease of printing money might be so tempting that the government might fail to apply the brakes when necessary. A stronger argument against it is the excessive increase in liquidity that successive issues of cash would create. If money printing were substituted for short-term borrowing, this would pose serious problems of liquidity control. It should be considered that short-term debt instruments are at least less liquid than cash and are not as acceptable as or cannot be converted to an acceptable medium of exchange without some loss. This factor provides a valuable check on money supply which would be lost if printing of money were substituted for borrowing through the issue of short-term securities. A vital instrument for the control of banks credit expansion would thereby be lost. In the absence of securities which could be manipulated, the central bank would have

⁷ Adewumi, O., 'The Use of the Public Debt Instrument in Nigeria', unpublished Ph.D thesis, University of Edinburgh, 1973, p. 93.

to rely solely on specific credit controls.

From the discussion above, it will seem that the success of minimising the budgetary burden of debt in reducing interest costs depends, like many other management techniques on too many "ifs". These "ifs" unfortunately happen to be so vital that they will always tends to mitigate the achievement of cost reduction as a goal of debt management.

2.1.4. The Islamic Views on Public Debt

In general, the government's need for debt finance mainly arises for three different reasons. It needs short-term finance to bridge the time gap between expenditures made and revenues collected or received. This need is presently met by the sale of treasury bills. Secondly, it needs medium and long-term finance for industries in the public sector as well as public utilities like transport , electrification etc. Lastly, it needs huge financial resources to meet natural calamities or to mobilise defence expenditure during a war.

From the first case above, there is no net productivity or actual return involved out of which a share could be ascribed to the money capital borrowed. Since a price is already set on loanable funds in the investment market, the government has to pay interest for these short-term loans, usually obtained by selling treasury bills of short maturity. The interest paid eventually comes out of the tax revenue. Since the lenders are moneyed people and it is they who pay most of the taxes in a welfare state, it amounts to taxing the same class of people to pay them interest. The cost of administering the tax, to the extent that it is related to interest payment must, therefore, be regarded as a social waste as well as an extra burden on this class necessitated by this irrational arrangement⁸.

Financing public sector industries and utilities through interest-bearing loans suffers from the same irrationality which attends investment in the private sector. The value productivity of investment in the public sector is as uncertain as it is in

⁸ Siddiqi, M. N., *Issues in Islamic Banking Selected Papers*, The Islamic Foundation, Leicester, 1983, p. 77.

the private sector, hence guaranteeing a positive return to the supplier of money capital is unfair. It amounts to transferring the entire burden of possible losses to the society as a whole, while assuring the suppliers of money capital of a guaranteed increment to their wealth.

Most of the huge public debts that the modern governments are carrying originated during wars that were financed by raising interest-bearing loans. It is argued therefore that the state should either raise funds by taxes or, if these are not sufficient, by compulsory interest-free borrowing from individuals and business. These should be in accordance with income and/or wealth and should be amortized over a specified period of time from war taxes. Such taxes should continue even after the war, perhaps at a lower rate, until the debt has been fully amortized.

The emphasis has to be on the careful evaluation of government expenditures and the elimination of as much fat as possible. Every effort should be made to increase efficiency in government spending and reduce wastefulness and corruption.

It would be more appropriate for an Islamic state to finance all its normal recurring expenditure out of tax revenues. For this purpose, there is generally no justification for deficits under normal circumstances. Deficits essentially imply postponing the payment for services received by the present generation to future generations. Since the future generations, like the present one, do not wish to pay for past deficits and also wish to postpone even a part of their own burden to the future, the public debt burden continues to rise exponentially. The argument that "postponing" is for services to be enjoyed by future generations is not valid. In the case of government consumption or wasteful expenditure and war financing, the increase in internal public debt no doubt represents the transfer of the burden to future generations. Even in the case of government capital formation, it must be borne in mind that the present generation is receiving benefits from projects financed by past generations. It would be fair to expect that the present generation, like past ones, would leave behind more capital than it has received. The financing of all consumption spending as well as a part of the capital outlays out of tax revenues would not lead to a continual and rapid expansion of the public debt as

has been the case in most developed as well as developing countries⁹.

The easy availability of credit to governments on the basis of willingness to pay interest has led to loose financing by governments. Banks pay "little attention to how borrowing countries were managing their economies" and "how their loans were being used". Very often governments borrow for a short-term because under normal circumstances short-term loans are easier to get and can be rolled over smoothly. The tragedy is that the funds raised through debt are not used for investment in "real" assets but simply to meet current expenditures, to purchase unnecessary defence hardware, or to finance projects having no economic justification. The result is a steeply rising mountain of "dead-weight" debt with a continuing rise in the debt-service burden. The resort to debt is made more and more as a means to put off painful, belt-tightening decisions. But greater borrowing now leads to even more borrowing in the future to maintain the economy on its path of artificial growth and to continue the debt-service payments.

To conclude this section, it is however, inevitable that the Islamic state must, of necessity, tailor its expenditure policy carefully and try its utmost to make the best use of available resources. This will be possible only if wasteful and unnecessary spending is avoided. This would necessitate that defence outlays be held within reasonable bounds, wasteful expenditure be eliminated, corruption be kept under control through moral reform of the society, and welfare spending be designed, not to enrich the vested interests but, in conformity with the teachings of Islam, to help those who are really in need.

In spite of this policy of honest austerity, the Islamic state can and should have reasonable deficit levels. One way of meeting these deficits would be equity financing of projects which are so amenable. If every effort is made to reduce waste and finance government projects on an equity basis to the extent feasible, the excessive borrowing now being resorted to may not be necessary. Equity financing would, however, demand maximum efficiency and discipline in the management

⁹ Chapra, M. U., *Towards a Just Monetary System*, The Islamic Foundation, Leicester, 1985. pp. 132-138.

of such projects which unfortunately is not the case in most public sector projects. Deficits which need to be incurred even after the introduction of austerity and equity financing, may be financed, in national emergencies, by compulsory lending to the government and, in normal times, by borrowing, partly from the commercial banks and partly from the central bank. The borrowing from the central bank should be within the limits dictated by the goal of price stability.

It needs to be clearly stated that there is no escape from sacrifice and austerity, if economic development and general well-being are to be pursued.

2.2. Private Sector Debt

The ultimate goal of debt policy is to influence the liquidity of the private sector in such a way that will lead to the achievement of the desired goal. This can be successfully done if the participation of the private sector is sufficiently large to form a significant proportion of their assets holding. If it is very low, for example, issue or retirement of debt will hardly go any way to influence their liquidity structure and thus effect a change in their economic behaviour. It will appear therefore that a very important problem of debt management is to ensure as much participation of the private sector as possible.

To start with, let us attempt to analyse briefly the various factors that influence the investment decisions of different categories of investors in the private sector.

2.2.1. Private Individuals

Investment by private individuals can be either indirect through participation in pension schemes or direct through compulsion by the government, or through a conscious attempt to save out of net disposable income and put the saving into a form that yields a dividend.

A person saving for his old age is likely to be extremely concerned about the security of his investment (where security is defined in term of low risk of loss of both financial and real value of investment). He is therefore likely to choose between bank deposits, investment in real property, investment in business shares, or investment

in government securities. The choice of the last two is likely to be influenced largely by his knowledge of such modes of investment and how to get into them, as well as his idea of the relative security of the assets, while investment in the second will depend on the size of his income.

Similarly, for the other group of savers, these features of investment in real property might give it a relatively high weight in their decision. On the assumption that this class of savers are prepared to take some risk, an additional investment opportunity is open to them. This is to employ any saving they have in running a small scale business.

From the discussion, the following general picture emerges:

The distribution of investment in the private sector between government securities and private business is affected by (i) the relative yield on both, (ii) the investor's concept of relative security, and (iii) the degree of indifference of private investors between yield and security¹⁰.

One can therefore conceive of rates of substitution, for each investor, of yield for security and vice-versa. Such rates will differ from one investment group to the other depending on their investment motive. For groups where the income motive is strong, the rate of substitution of yield for security will be high and investment will be more interest elastic. However, for groups whose investment motive is to provide for a specific future eventuality, e.g. old age or future projects, the rate of substitution of yield for security will be low, hence investment will not be interest elastic and the security element will be stronger. This means that the strategy to adopt in increasing the private sector's investment in government debt is either to increase the yield or security, depending on which group is the target.

Consequently, short term loans will attract more participation by the private sector than long-term ones. Also, increasing investment in long term debt will have to be secured either by (i) offering a substantially higher rate of interest which more

¹⁰ Tobin, J., 'Liquidity Preference as Behaviour Toward Risk', *Review of Economic Studies*, Vol. VVX, 1958, pp. 65-86.

than compensates for whatever discount of value people might place on the monetary value of the investment or (ii) offering on such terms that the debt instruments are guaranteed against a loss in real value.

2.2.2. Business Firms

The business firm's decision to invest in government securities will also have to revolve around their idea of the relative profitability of alternative ways of utilising investible surpluses.

Four possible alternatives are open to them. A firm can keep its surplus in the form of balances in the bank, plough it back into its operations, invest in some other business enterprise, or invest in government securities. One naturally expects the second alternative to take priority, but only in so far as the firm thinks it has got to the limit of its expansion possibility, or does not have enough surplus to increase its scale of operation, or feels that it can get a higher return on any other alternative than the current return on its capital. Only then will these other alternatives come up for consideration.

Where a firm wishing to expand does not have sufficient investible surplus, it can do one of two things. It can, for example, borrow from the banks such extra funds as are necessary to make the expansion possible provided the interest to be paid is not above the expected increase in profitability that might result from the expansion. An alternative to that is to put whatever surplus there is into financial assets as a temporary investment until it is able to muster enough funds for its programme. In that case, short-term government securities might be an attractive proposition.

2.2.3. Consumer Debts and Islamic Views on the Subject

The requirements of daily life are becoming more and more complex. Therefore, the importance of consumption loans for the genuine requirements of individuals can hardly be over-estimated. Consumption loans are more or less unproductive in nature, though their influence on the productivity of the community has an indirect bearing in so far as it stimulates production and supply.

Some families finance their major purchases by borrowing money from a commercial source. Others find it necessary to borrow money to pay off their consumer debts or to meet emergencies. Borrowing money from a lending institution depends on the family's credit standing as well as on its needs. Higher-income families and those whose income is based exclusively on earnings are more apt to obtain such loans¹¹.

The younger families (where the head is under 30 years of age) and the older (where the head is over 50) borrow money less often than those of middle age. Families headed by persons between 30 and 39 years of age most often take out loans. This age pattern suggests that through the life cycle debts are shifted from stores to banks and finance companies, and the younger families are apt to turn to stores for installment credit. As their debts mount and payments become increasingly more difficult to meet, they are inclined to obtain loans to pay off their other debts. In this way they obtain relief in the form of small monthly payments at the cost of a longer period of indebtedness.

From the above analysis, consumer credit can be viewed as a case of the breakdown of a system of exchange that is inherently unstable because it rests upon the consumer's poor credit status and his ignorance. The risk factor becomes evident in the breakdown resulting from missed payments. Often this is not independent of the consumer's lack of sophistication. But some consumers become overextended because they have been victimized by the high-pressure salesman who urge too great a debt burden on them. And sometimes the failure to maintain payments is a consequence of the merchant's trying to exploit the consumer's ignorance. When this is discovered, the consumer may stop payments.

Since the system also rests upon the consumer's ignorance, this too contributes to its instability. The exchange system becomes strained when events suddenly make the consumer aware that he did not know what he was doing. He realizes that he has been exploited when the merchandise he buys falls apart, not after a

¹¹ Caplovitz, D., *The Poor Pay More, Consumer Practices of Low-Income Families*, The Free Press, New York, 1967, p. 99.

few years, but in a few months or even a few days.

With respect to consumer credit Islam does not encourage a high consumption economy like that under capitalism. Credit for this purpose should hence be discouraged as should the purchase of such goods even for cash payment. Therefore, a substantial part of instalment credit may not be necessary. The rest, which is considered necessary for realising Islamic objectives, could be arranged by the instalment business on a *mudarabah* basis from individual financiers and financial institutions with whom the dealers have a profits-and-loss sharing arrangement. The business concerned has to raise equity finance for its entire financing needs. It is on this total financing that the firm would normally be sharing profits or losses and not on individual sales. If the firm has not raised sufficient equity finance, it will be constrained to rely on cash sales. If it expands into the area of instalment sales beyond the limits justified by its resources it could fall into trouble.

Also the cost of servicing instalment sales are notoriously high, necessitating a very high rate of interest on instalment credit. The price the consumer actually pays for these articles is much higher than its market price. It is not surprising, therefore, that recourse to consumer credit may eventually result in a lower standard of living. Easy availability coupled with high-pressure advertising and aggressive sales promotion leads many families into indebtedness to an extent hardly justified by their present assets or future income prospects.

Business firms would therefore have to raise sufficient equity, if they wish to expand sales beyond the volume permitted by their own equity. They would also have to manage their cash flows wisely without over-extending themselves.

Instalment purchases of socially necessary goods, like taxis, sewing machines, cottage industry equipment and the like, which are in keeping with Islamic values and goals, could be arranged through financing from the private sector on a profit and loss sharing basis and supplemented by financing from specialised credit institutions established by the government.

In short, the institution of easy consumer credit is responsible for many ills

for those directly involved, besides its painful effects at the macro-economic level. It puts the debtor families under great psychological strain. It leads to break up of homes, ill health and even loss of jobs. Eventually the debtor may end up in complete ruin, economically as well as otherwise.

Social intervention to prevent these evils can hardly succeed without striking at the root of this institution. We have already noted that no rationale exists for fixed interest charges on consumer credit. If it is desirable to facilitate the acquisition of consumer durables the society has to find some alternative ways of doing so.

2.3. External Debt

2.3.1. Origins of the Problem

In the early 1980s, interest rose internationally as the United States budget deficit increased (due to tax cuts and rising military expenditure). Borrowing increased, but lenders would only provide funds at higher interest rates. These domestic US developments were reflected in the Euro-markets.

The bulk of external debt is sovereign debt: amounts owed abroad by national governments, by their decentralized agencies, or by private firms but with public guarantees. However, a considerable portion of the debt owed by the private sector is without public guarantee. The World Bank estimates that 80% of long-term developing countries' debt was public or publicly guaranteed in 1981, and 20% was private.

Higher inflation tends to cause higher interest rates. When this occurs, higher current debt service must be paid, because approximately two-thirds of developing countries debt is at floating interest rates tied to the London Interbank Offer Rate (LIBOR). But higher inflation also erodes the value of the debt that eventually is to be repaid. Accordingly, high interest rates caused primarily by high inflation have the effect of causing a great present cash flow burden in return for eroding the real value of outstanding debt.

In effect, they cause accelerated amortization of the debt in real terms¹².

Export stagnation was driven both by global recession (which caused export volume growth to decline) and by dollar appreciation and commodity price erosion (lowering the dollar value of export earnings). Domestic policies in debtor countries also played a role in increasing debt in important cases.

According to the latest OECD statistics published in 1985, total debt of LDCs at the end of 1984 amounted to \$889.5 billion. Out of this debt, an amount of \$533.3 billion, which equals, 60%, consisted of bank credits. Compared to the LDC debt at the end of 1980, a doubling has taken place.

The top ranking debtor countries are Brazil (\$105.4 billion), Mexico (\$94.7 billion), South Korea (\$44.4 billion), Argentina (\$44.4 billion), Indonesia (\$32.7 billion), and Venezuela (\$28.7 billion). Most of these countries, since the early 1980s, have found that they are unable to even service, let alone repay their debts.

Since the literature on external debt and the main causes of it can be found in various detailed studies, we will, therefore, not discuss the issue here, as our objective in this section is mainly to examine briefly the origin of external debt and to present the Islamic views on the subject.

In sum, there are significant domestic as well as foreign causes of the debt problem. Nonetheless, it would be inaccurate to indicate that the bulk of the debt contracted has failed to go into productive investments; the evidence tends to indicate that most borrowing was productively used. But it remains true that because the magnitudes of the external economic pressures on developing countries became so great, there was little margin left for domestic policy error. In evaluating domestic policy, it must also be kept in mind that the sharp decline in the global economy, the rises in interest rates, and oil price increases were generally not predicted, and few would have advocated the extremely cautious borrowing policy that would have been consistent with foreknowledge of these global shocks.

¹² Cline, W. R., *International Debt*, Institute for International Economics, Washington, 1984, p. 2.

2.3.2. Islamic Views on the Subject

Islamic economists take the view that the international debt problem would not have reached its present dimension if the prohibition of interest payments had been followed by the international banking business. Consequently the debt problem could be reduced provided that the prohibition of interest payments is considered in the future. In accordance with this view credit based upon interest payments should be replaced by equity financing.

But first the question can be raised regarding the economic problem and what is it that is wrong? The answer would depend essentially on our basic philosophy of life as this will determine our analysis of the underlying cause of the problems. No treatment can be effective unless it is addressed to the mainspring of the crisis. Nevertheless, the mistake commonly committed is that the source of the crisis is sought in symptoms: huge budgetary imbalances, excessive monetary expansion, large balance of payments deficits, rise of protectionist tendencies, insufficient foreign aid and international debt. The result is that the remedies adopted, ease the crisis only temporarily. After a short time, the crisis reappears, deeper and more serious.

The Muslim countries are not different. They are faced with the same problems as other countries. They are, however, thoughtlessly following the west in everything and committing the same mistake of looking only at the symptoms. No serious effort is being made to analyse the underlying source of their problems and to determine a proper strategy for solving them in the light of their own value system¹³. Within the Islamic perspective, the roots of the crisis lie deeper and no effort to solve the problems through cosmetic changes will succeed. There is need for a thorough reform.

Generally speaking, debt finance whether government or private or coming through international "aid" agencies, is supposed to help increase production in the debtor countries which should eventually be in a position to pay back, with interest.

¹³ Chapra, op.cit. p. 20.

The practice is justified on the basis of the alleged net productivity of capital. In the nature of things, however, uncertainty of the value productivity of capital is most pronounced in this sector for a host of reasons.

Not all the debts obtained by poor countries go to finance development. Part of it may go to finance needed consumption. In some cases it may go to finance defence mobilisation or part of the aid may go to finance the cost of government. These non-productive uses could not possibly provide for repayment of the principal, much less for creation of additional value to justify payment of interest.

Insofar as external loans were utilised for productive purposes they were usually attended by circumstances which greatly reduced their efficiency in serving the real long-term interests of the debtor countries. Creditors imposed strategies designed to serve their own interests rather than those of the aid recipients.

Other negative effects of "aided" development have been the worsening distribution of income, increasing social unrest and an ever more wasteful use of resources. For the creditor countries and their multinationals, it was an exercise in creating new markets for their exports and making the debtor economies more and more dependent on their own economies¹⁴.

Also poor countries have been goaded into debts far beyond their means and induced to use the resources so obtained in an extravagant way. They have learnt to live beyond their means and not to tighten their belts, save, economise and work hard to build a better future. The easy availability of loans and the possibility of continuing to borrow with no chances of repayment in sight have further aggravated the situation. For this, the main blame lies on the basis on which these transactions were effected, commitment to repay with interest irrespective of the actual outcome of the utilisation of these resources.

The present system of interest bearing loans and three decades of debt financing have not been able to make the debtor countries self-sufficient or even less dependent, not to speak of their being able to generate surpluses to pay back. This has

¹⁴ Siddiqi, op.cit. p. 79.

put the world economic order under heavy strain. The rationale of interest bearing debt in the context of international economic cooperation is being seriously questioned, and it can hardly bear close scrutiny. Much of the entire world community is convinced of the need for a new economic order radically different from the present one. It has, however, yet to realise the priority of abolishing interest as the basis of rich-poor financial transactions as the first step towards such a change.

2.4. Debt (Bond) Financing from the Firm's Point of Views

A firm, wishing to raise funds to meet its financing requirements, has a variety of alternatives available for consideration. It may issue common stock, bonds, preferred stock, convertible debentures, and so on, to raise funds. There are different types of bonds which have varied features.

A bond is a promissory note issued by the firm to an investor. Firms, of course, do not issue bonds in £1,000 denominations one at a time. Rather, after assessing its financing requirements the firm will issue millions of pounds worth of bonds and sell them to thousands of investors. Each new debt issue is governed by an indenture or contract between the borrower (the firm) and the lender (the investor). The contract agreement contains covenants or terms and provisions such as the interest rate, maturity date, redemption price, safeguards for lenders, and so on¹⁵.

Bonds can be either registered or bearer bonds. The holder of a registered bond has the bond recorded in his name in the company's book and receives the interest payments automatically. A bearer bond is not registered in anyone's name. The bond possessor is the assumed owner also. Bearer bonds have coupons attached to them. At scheduled dates these coupons are redeemed by the owner for the interest payment.

Typical types of bonds include mortgage bonds, debentures, subordinated debentures, and income bonds. It is not necessary here to explain the different types of bonds given the subject of this thesis.

¹⁵ Mathur, I., *Introduction to Financial Management*, Macmillan, New York, 1979, pp. 401-403.

2.4.1. Role of Debt in the Financial Structure of a Firm

In modern business organizations capital requirements are so immense that a single source of finance is insufficient. Therefore, we notice that large corporations in general have a diversified ownership structure. But what is somewhat difficult to understand is that these organizations use different kinds of financing methods.

The question then is, why do firms obtain funds through different forms of financial instruments? In particular, why do firms use both debt and equity to finance their capital needs?

Now, suppose the owners of a firm purchase some capital input this year which will produce some output next year. Suppose, furthermore, that if the input level is y , next year's output, which for the sake of simplicity may be assumed to consist of the same goods, is $\phi F(y)$, where ϕ is some parameter which may be a random variable. Consider the following two financing possibilities open to the owners of the firm. They can borrow an amount y this year, pay back $(1+r)y$ next year, where r is the rate of interest, and keep the residual, namely $\phi F(y) - (1+r)y$. Alternatively, they can sell a claim to some portion of next year's output up to a value of y and then, when next year's output is produced, they can settle the claim and keep whatever is left. Thus we have two possible methods of finance which apparently yield two different returns to the owners. The first of these is called debt financing (or bond financing) and the second equity financing¹⁶.

Controversy started after the Miller-Modigliani theorem which states that the value of the firm is independent of its financing decisions. This result was questioned given the fact that most firms have some amount of debt and equity in their capital structure. Many writers have tried to place the role of debt in a firm's capital structure by relaxing the assumptions of the Miller-Modigliani theorem. In the beginning, efforts centred on the no-bankruptcy and no-taxes assumptions. If the probability of bankruptcy is positive (and it is costly to go bankrupt) then firms and individual borrowers cannot have equal access to credit markets. Firms can

¹⁶ Nickell, S. J., *The Investment Decisions of Firms*, James Nisbet, England, 1978, pp. 149-151.

issue debt at a lower rate than individuals and this raises the value of the firm. On the other hand if debt payments are tax deductible then again, debt would be cheaper relative to equity.

Many authors like Stiglitz, Jensen and Meckling and Grossman and Hart have a relaxed and a somewhat different assumption of the Miller-Modigliani theorem: that the firm's production function is independent of its financial structure¹⁷.

Stiglitz, Jensen and Meckling consider the situation of an investor who has access to an investment project but does not have sufficient funds to finance it. If the investor raises funds by issuing equity, then as he will have a less than 100% interest in the project he will not manage it as carefully as he would had he been a full owner. If, on the other hand, the investor issues debt his incentive to work is reduced much less since, except in bankrupt states, he gets the full benefits of any increase in profits. Thus to Stiglitz, Jensen and Meckling, debt is a way of permitting expansion without sacrificing incentives.

Suppose for example a firm has decided to drill an oil well. Suppose further that the firm has to raise the funds from outside sources. If the firm issues debt then it has to pay a fixed sum of money to the lender while if it issues equity then the lenders owns a share in the oil well. Finally, assume that it is costly for the lender to monitor the performance of the project. If the lender relies on the reports of the firm there might be an incentive problem: the firm would tend to under-report the project's performance.

2.4.2. Disadvantages of Debt (Bond) Financing

Mathur believes that financing with debt increases the firm's financial risk because of increased levels of fixed charges in the form of interest expenses. During adverse conditions a firm can stop its dividends. However, a firm encountering adverse conditions cannot avoid its interest payments. The presence of interest-bearing debt in the firm's financial structure increases the firm's exposure to bankruptcy¹⁸.

¹⁷ Khan, W. M., *Towards an Interest-Free Islamic Economic System*, The Islamic Foundation, U.K & The International Association for Islamic Economics, Islamabad, 1985, pp. 54-55.

¹⁸ Mathur, op.cit. p. 409.

Debt financing involves dealing with indentures and covenants. The conditions and requirements imposed on the firm by bondholders may limit the firm's financial mobility in future years.

There is a limit to how much debt financing by a firm is going to be deemed acceptable by the firm's creditors. If a profitable firm is 100% equity-financed, it normally would not have any problems with additional equity financing. However, even if a firm is profitable, investors may be reluctant to buy its new bonds if they feel that the firm is already over leveraged and has a high financial risk. A firm that exceeds or tries to consistently exceed industry-accepted norms for debt financing may find the market very unreceptive to its new financing instruments, irrespective of whether they are bonds or common stock.

2.4.3. Islamic Views on Debt Finance

We have to consider the relationship between the creditor and debtor from the perspective of the creditor. He is always concerned about the safe return of the principal lent along with the interest stipulated. The best way to ensure this is to advance money only to creditworthy borrowers who have enough assets to fulfil their commitments. The creditor's interests are best served when the borrower has the ability to meet his obligations irrespective of the fate of the actual project in which the loan is to be invested. Even if the project seems to be sound he will hesitate to make a loan if the borrower does not have sufficient assets independent of the projected enterprise. Debt finance goes to the most creditworthy parties, not to those with the most promising projects. Since the financiers get only the market rate of interest as stipulated in their contract with the borrower, the prospects of the entrepreneur making a higher than average rate of profit are not of immediate relevance to them. What matters more for them is safety, which may at best require a reasonable expectation of making enough profits to pay the contractually fixed interest.

Let us turn our analysis and consider the creditor-debtor relationship from the perspective of the debtor. The user of investible funds is naturally keen to employ

them as profitably as he can. This may sometimes require innovation and experimentation with new methods of production. But the contractual obligation to repay the principal and pay interest irrespective of the results of enterprise acts as a severe constraint¹⁹. This is true of small farmers and small-scale enterprises who do not have any reserves of their own to fall back upon in cases where the adoption of new practices does not yield good dividends. The refusal of the supplier of capital to share the uncertainties involved deprives the society of possible gains in the productivity of capital through innovation and the adoption of new techniques.

We have argued above that in an interest-based system of financing productive enterprise, expected profitability ceases to be effective in ensuring an efficient allocation of investible funds because of the terms on which these funds are supplied. We shall now proceed to argue that the debt financing method is unjust and results in a maldistribution of income and wealth in society.

The entrepreneur, for example, tries his best to make profits since his own rewards always rest on his making a profit. The possibility of loss in a business enterprise arises not only from the quality of entrepreneurship but from the nature of the world in which the enterprise is carried out. Therefore, there is no justification for prescribing a certain return when in the nature of things it is uncertain. Money capital seeking a positive return through enterprise ought to and must bear this uncertainty.

When the enterprise incurs a loss the entrepreneur is made to bear the loss and pay the interest out of his own assets. This may result in his disability insofar as future entrepreneurial activities are concerned. From the social and individual point of view this is very unfortunate. As we have mentioned above, the incidence of loss does not necessarily imply bad entrepreneurship. It is in the nature of the world around us that some enterprises sometimes fail. It is sufficient to caution the entrepreneurs that in the case of failure they go unrewarded for their entrepreneurial services, earning no profits. But to disable them by depriving them of part of the assets accumulated in the past is hardly justified. It encourages the wealth owners to

¹⁹ Siddiqi, op.cit. pp. 69-74.

act as lenders and rentiers rather than expose their wealth to entrepreneurial risks, either directly by investing them in owner-enterprises or indirectly by offering them as collateral against loans obtained for enterprise. In a system of debt financing, the wealthier owners who choose to lend and wait, steadily grow richer over time whereas wealth owners who choose to expose their wealth and abilities to the risks of productive enterprise have no such guarantee.

Also the contractual commitment (between the entrepreneur and the financier) to repay the loan with interest is not in harmony with the reality. There is no justification for obliging the entrepreneur to pay interest if there is no positive return on the money capital invested. To claim the contrary, as prevalent in the interest-based system, requires that money capital be regarded as essentially of productive value; but this is not the case. Value is a market phenomenon and not an intrinsic property of money capital. Given the uncertainty of prices of the products the total value resulting from the employment of money capital in production may be more than, equal to, or less than its own value. This is true irrespective of who employs the money capital, its owner or someone else to whom it is advanced.

The injustice of the interest-based system to the savers and creditors becomes much more pronounced in an inflationary situation. When the rise in the rate of interest may lag far behind the rise in prices and profits, depositors may actually get a negative return if the rate of interest is lower than the percentage rise in prices. The lending rates of the banks also fail to keep pace with rising prices, leaving businessmen to collect the profits.

2.5. Conclusions

In this chapter our objective has been to analyse the problems of debt financing and to express the Islamic views on the subject. We have briefly explained government debt, private sector debt, external debt and debt financing from the firm's point of view. We argued that prohibition of interest and its replacement by profit-sharing is feasible and desirable for the good of society.

To appreciate the rationale of this change, one has to grasp the Islamic view of the relations between man and man and the nature of the world in which man engages in productive economic enterprise. It is an uncertain world in which the value product of enterprise cannot be predetermined. To claim a predetermined positive return to money capital when capital and enterprise jointly engage in production runs counter to this reality. It amounts to exploitation of the entrepreneur by the owners of capital, as the entrepreneur is left alone to bear the uncertainty which in reality is devolved on both. This arrangement is considered unjust according to Islamic principles.

Islam abhors injustice and exploitation and seeks to forge economic and other relationships on the basis of justice and cooperation. In an Islamic economic framework, a replacement of the unjust and exploitive institution of interest by the just and cooperative arrangement of the profit and loss sharing system is, therefore, a socio-economic as well as a moral spiritual imperative.

CHAPTER THREE

AN ANALYTICAL FRAMEWORK FOR THE PROFIT-LOSS-SHARING SYSTEM MUDARABAH

Introduction

In the preceding chapter we have examined the problem of debt financing and the Islamic views on the subject. Under the traditional model of financial intermediation, the primary mode of finance is debt, and interest is the corner-stone of financial transactions. One hardly finds examples of other modes of financing under the present system. In fact interest is so deeply embedded in the present system that an ordinary bank and a common user of bank services cannot imagine dealing in capital without the medium of interest.

The proposed Islamic model of financial intermediation is in the nature of venture capital financing. Under this system, a bank writes two sharing contracts. On the savings side, the bank guarantees no fixed return to the saver, and on the investment side, the bank does not require any fixed return from the investor. It should be clear that under such a system the banks, acting in the best interests of depositors, pursue an active financing strategy. More precisely, under the proposed Islamic system all capital is risk-capital, since all funds are received and provided on the basis of sharing in the profits and losses of the enterprises.

The purpose of this chapter is to examine analytically the framework for the profit-loss-sharing system called *mudarabah*. The chapter is divided into seven sections. First, we discuss the economic and philosophical principles of Islam and banking under Islam. Second, we define and explain *mudarabah*, a subsection critically examines *mudarabah* as a company, its legitimacy and prerequisites. Third, different types of *mudarabah* are identified, and fourth modern applications of the profit-loss-sharing system reflecting the ethical basis for contemporary adoption are discussed. Fifth, financial intermediation is examined and, sixth, the effects of the profit-loss-sharing system on saving and investments are analysed. Finally some

conclusions are drawn.

3.1. The Economic and Philosophical Principles of Islam for Banking

There is a consensus among Islamic economists that there are two key elements to the economic philosophy of Islam:

“One related to the real or ultimate owner on earth and the other related to the relationship between man and the real owner”. Thus, the first principle states that *Allah* is the creator of everything on earth and in the heavens. This argument is evidenced by the *Quran*:

“Allah’s is the sovereignty of the heavens and the earth and all of that between them. He creates what he will. And Allah is able to do all things”. (Verse 17)

Also in *Sorat AL-Imran*, the *Quran* States :

Say: “O God! Lord of Power (and Rule), Thou givest Power to whom Thou pleasest, And Thou strippest off Power From whom Thou pleasest: Thou enduest with honour Whom Thou pleasest, And Thou bringest low Whom Thou pleasest: In Thy hand is all Good. Verily, over all things Thou hast power”. (Verse 26)

These and many other verses of the *Quran* consider resources of various kinds as the gift of *Allah*. Human beings are only trustees who should utilise these resources in an efficient way to fulfil *Allah*’s will for establishing prosperity on earth for the good of all mankind.

Accordingly, a Muslim entrepreneur is considered only a “vice-regent” on earth and this principle of the “vice-regent” man brings us to the second key element of the philosophy of Islam. Man’s right to ownership is obtained by proxy from *Allah* and as *Allah* made man his “vice-regent”, man must function according to his teachings and in the end be accountable to *Allah* for all deeds; be they good or bad.

The principle of economic trusteeship thus suggests that the object of a maximisation of profit is not the objective of an Islamic institution. The Islamic firm should rather be satisfied to realise a "reasonable" or "fair" level of profit if that enables it to achieve the more important goal of "doing good to please *Allah*". The same would apply to a Muslim customer of such an institution who invests or deposits funds on a profit or loss basis.

Although Islam recognises the differences in the capabilities of different people, nevertheless it is obvious that in order to satisfy its requirements of economic and social justice, certain basic necessities must be guaranteed to every citizen of the state. These include food, clothing, shelter, health services and education¹. No citizen, even if his earning capacities are close to zero, can be denied these rights under Islam. There are various reasons for it being so. Firstly, all of these basic necessities are essential for a human being. The second reason, closely allied to the first, is that the Islamic requirements for the development of human individuals cannot be satisfied unless everyone gets a chance. If a person is denied any of the basic necessities, his chances to develop are thereby dimmed and may in fact be negated. In fact, the establishment of economic and social justice is necessary for this very purpose. This brings us to a consideration of two important points which concern traditional economic theories.

The first concerns the motivation and behaviour of individuals (entrepreneurs and customers) within the Islamic framework. A hallmark of economic theorising is the assumption that the rational individual will "act in his interest" when exercising a choice, and secondly that economists should not be concerned with the motives behind man's economic behaviour but primarily be concerned with what constitutes an economic relationship.

All of the *Quranic* verses quoted above, suggest that the owners, managers of an Islamic bank or an Islamic firm are to direct their energies and efficiency to the investment and spending of wealth within the permitted domains of expen-

¹ Rahman, F., 'Economic Principles of Islam', *Islamic Studies*, Journal of the Islamic Research Institute, Islamabad, Vol. VIII, March 1969, No. 1, p. 3.

diture and investment, in such a way that fulfils their and their dependents needs without infringing on the interests of the community. This in turn will create goodwill for the firm's products or bank's services. Similarly the expenditure of firms on charities and good deeds must follow the same guidelines. In effect, such expenditure is akin to spending on advertising but this is not to suggest that spending on good deeds by an Islamic firm will be a complete replacement to advertising.

Islamic enterprises can fulfil important social functions. These include direct payments to the poor and needy in the community and expansion in the number of workers employed by the firm even beyond the level warranted by profit maximisation. This will help in alleviating the problem of unemployment. "Good deeds" may also take the form of building hospitals, schools or mosques².

Moderation in fulfilment of economic ends is emphasised in Islam and greed is decried, as is extravagance (*israf*) and excessive expenditure on goods and services prohibited by Islam (*tabthir*). Economic relations, particularly in the production and exchange of wealth should be cooperative in nature. Indeed, cooperation is seen as one of the basic values in Islam's economic philosophy. This does not however rule out free and fair competition in the market provided that all economic agents adhere to Islamic morality. Nevertheless, competition is emphasised in opposition to monopoly, the elimination of which is regarded as a prerequisite to ensuring justice and growth.

The economic philosophy of Islam also creates a powerful drive for development. Indeed, development efforts are seen by the true Muslim as striving in the cause of *Allah*. Islamic principles are consequently a motivating force for development³.

² Elzubeir, E. K., 'The Marketing of Islamic Banking Services with Particular Reference to the Faisal Islamic Bank of Sudan', unpublished Ph.D thesis, City University Business School, London, 1984, p. 72.

³ Siddiqi, M. N., *A Survey of Contemporary Literature on Islamic Economics*, Paper presented at the International Conference on Islamic Economics, Mecca, Saudi Arabia, April 1975, p. 21.

3.2. Meaning of Mudarabah and its Definition

Al-Mudarabah implies that one person hands over money to another for the purpose of investment. The first party is called the investor or money owner while the second party is called the *mudarib*. In a sense, therefore, the *mudarib* is a trustee or agent. The money lender or money owner is normally a sleeping partner. The net profits realised are divided between the two parties according to certain ratios agreed upon in advance. Any loss on capital is borne by the owner of the money and the *mudarib*'s only loss is his efforts and the expected profit. Of course, the *mudarib* can be sued for any wilful act or negligence on his part.

Al-Mudarbah is a type of contract that prevailed between the Arabs in the pre-Islamic era of paganism (*jahilia*) and later Islam endorsed it as a mean of investment and profit sharing. Three Arabic terms are used to designate this kind of business organization: *qiradh*, *muqaradah*, and *mudarabah*. The terms are interchangeable with no essential differences in meaning or connotation among them. The divergence in terminology was probably originally due to geographical factors. The *Hanafis* and *Hanbalis*, following the convention prevailing in Iraq, have used the words *mudarabah*. Meanwhile, the *Malekis* and *Shafeis* have used the word *qiradh* or *muqarahad* following the convention in Hijaz.

In *fiqh*, both *mudarabah* and *qiradh* refer to a profit and loss-sharing (PLS) contract of a company in which the first party (or parties) the *rabbulmal*, (or the capitalist) participates with financial capital, and the second party, the *mudarib*, (or the worker) with his effort. The resulting profit is apportioned between the two parties according to a preagreed formula.

3.2.1. Mudarabah as a Company

Contemporary writers of Islamic jurisprudence have defined *mudarabah* as a profit-loss-sharing (PLS) contract. Since this contract is a form of a company, it would be helpful to review the related classification of contracts and companies.

Companies are classified into two categories. The first category is the property company in which an asset and/or its services are jointly owned by more

than one person. The property company is either voluntary or obligatory. The second kind is the contractual company in which persons agree on some course of a joint action, particularly a formula for providing capital and sharing profit. Contractual companies are of five kinds:

1- Rein Company: in which a number of persons jointly provide capital and effort for investment. Neither capital nor effort need to be shared equally, while profit is to be divided according to a preagreed formula.

2- *Mudarabah* Company: in which persons provide a second party with specific resources for investment for a pre-specified share of the profit. When the profit share of the capital provider is set to zero, the company collapses to a mere (interest free) loan. The second party may accept such an arrangement for the benefits resulting from pooling some of its resources with those of the first party in investment. The larger size of capital could bring forth higher profits on the investment of the second party's funds.

3- Labour Company: which is composed of persons pooling their efforts and expertise to undertake jointly certain tasks and share the returns according to some preset proportions. It is not necessary that members of such a company should have the same profession, nor the returns gained be a result of the efforts of all.

4- Parity Company: which gives all partners equal power to act on behalf of each of the others in all fields. It thus encompasses all the categories of companies combined. Parity in power between partners has been critically considered and some insist that they also should be equal in wealth. Others, noting that absolute parity cannot be ascertained, stated that such a company could be prohibited⁴.

5- Goodwill Company: in which partners do not provide any capital. Instead they use their goodwill to obtain credit from suppliers. This is why the *Shafei* and *Maleki* schools prohibited such company, noting that companies are

⁴ Al-Jarhi, M. A., *Mudarabah, Principles and Practical Applications*, Paper presented at the Seminar on Islamic Financing Techniques, December 1984, Islamabad, p. 2.

related to either effort or capital, whereas both are absent. However, the *Hanafis* and *Hanblis* have approved it on the basis of the effort it involves.

To conclude this section, one can say that *mudarabah* is best viewed as a company in the form of a contractual arrangement. This view facilitates its treatment as a set of economic relationships, within a legal institutional framework.

3.2.2. Legitimacy of Mudarabah

As mentioned above, *mudarabah* is based on the principle of bringing together the capital, on the part of the capital owner, and know-how and labour on the part of the *mudarib* (labour partner). The *mudarib* employs and invests the capital within the framework agreed upon with the capital owner in the fields of activity agreed. The given profit is to be divided between the two partners according to a pre-determined and agreed upon percentage that has been pre-publicized. As for loss, it is to be borne by the capital owner entirely unless it is proved that the *mudarib* was neglectful or incurred an infraction to the conditions of the *mudarabah*. Only then can the *mudarib* be made accountable for the loss⁵.

A *mudarabah* may be undetermined (general) in which case the *mudarib* is entitled to select and evaluate the fields of employment and investment in line with his experience and know-how. It may also be limited (oriented) in which case the capital owner authorises the *mudarib* to employ and invest this capital in a certain line of activity or project.

3.2.3. Prerequisites

There are five conditions which need to be satisfied in order to have a legitimate *mudarabah*. They include the contractual form, and conditions related to partners, capital, labour (effort), as well as profit.

⁵ El-Sarraf, M. F., 'Financial Dealings in Islamic Banks', *Journal of Islamic Banking and Finance*, Karachi, Pakistan, Vol.1, No.1. 1984, p. 12.

(A) Contractual form:

As a contract, *mudarabah* must contain the two main elements, viz, an offer and its acceptance. It must be noted, in addition, that the contractual relationship between the two parties: *rabbulmal* and the *mudarib* is flexible in the sense that it fits into different moulds, some of which are:

1- When the *mudarib* receives the capital he is considered as a trustee who is obliged to return the funds, if requested before starting to work.

2- When the *mudarib* starts working he becomes an agent of *rabbulmal*, acting on his behalf.

3- When profit is realized the relationship becomes a contractual company in which profit is to be shared.

4- If the *mudarib* violates some of the conditions or restrictions contained in the contract, he becomes an usurper who is fully responsible for guaranteeing the return of the capital in full.

(B) Conditions related to partners:

Mudarabah partners must be legally competent. *Rabbulmal* (capitalist) must be competent to appoint an agent, either directly or through his legal guardian. The *mudarib* must be competent to act as an agent.

(C) Conditions related to capital:

The *mudarabah* capital should have the following characteristics:

1- It should be in monetary, or at least in financial form, not in merchandise form. The reason is that the value of merchandise might change during the period of *mudarabah*, which introduces uncertainty to the value of capital and hence, to the profit.

2- It should be present either at the time of concluding the contract or at the time of starting operations.

3- It should be of a quantity and quality known at contract time.

4- It should not be in the form of debt (receivables), for debt may or may not be collectable. It is possible that the *mudarabah* contract appoints the *mudarib* as a collecting agent to collect the debt and then invests it. If the debt is owed to the *mudarib* himself, it should be present with him at the time of contract⁶.

5- It should not be composed of funds mortgaged with the *mudarib* against a debt owed by *rabbulmal* , even if *rabbulmal* allows the *mudarib* to use the mortgaged funds for investment.

(D) Conditions related to labour:

The *mudarib* , who represents labour in the *mudarabah* arrangement, is supposed not to violate the rules of the contract. He is also supposed to stay within the restrictions set out by the *rabbulmal* , provided that such restrictions do not completely close the door for investing the funds.

It is questionable whether the *mudarib* can be asked to provide guarantees. Scholars have agreed that an absolute guarantee of capital automatically nullifies the *mudarabah* contract, with the exception of the *Hanafis* who nullify the condition keeping the contract in effect. Meanwhile guarantees against negligence, contract violations, and inability to meet one's obligations are permissible.

Also it is questionable whether the *rabbulmal* is allowed to work with the *mudarib*. Some scholars give a negative answer, on the basis that the *mudarib* must have full authority to act. Some *Shafeis* reason that when *rabbulmal* can appoint two *mudaribs*, neither would have full authority. Therefore, they allow the *rabbulmal* to work with the *mudarib* even if this limits the latter's power.

Abu Ghudda⁷ uses this opinion as a basis of approving the participation of *rabbulmal* in contemporary companies, in managerial or technical capacities, especially as these companies have legal (as opposed to natural) personalities where

⁶ Abu Ghudda, A. S., *Mudarabah or Qiradh and its Contemporary Implications*, Paper presented at the Second Islamic Bank Conference, Kuwait, 1983, pp. 4-5.

⁷ Abu Ghudda, op.cit. p. 15.

decisions are made by a selected group.

(E) Conditions related to profit:

Profit, according to the *Hanafi* opinion can be earned in three ways. The first is to use one's capital. The second is to employ one's labour. The third is to employ one's judgement which amounts to taking a risk as in the case of subcontracting.

In a *mudarabah*, the way profit must be apportioned between *rabbulmal* and the *mudarib* must be agreed upon and stated in advance. Since profit is defined by Muslim scholars as growth of capital, the share of the *mudarib* must be related to the profit and not to the capital⁸.

3.3. Types of Mudarabah

The *shariah* distinguishes between two types of contracts: a limited mandate and an unlimited mandate *mudarabah*. A *mudarabah* contract with unlimited mandate is one in which the investor authorizes the agent to act completely at the latter's discretion in all business matters. In this case, the agent may perform many transactions such as buying and selling all types of merchandise as he sees fit, buy and sell for cash and credit, hire helpers as needed, rent or buy animals or equipment, travel with the capital, mix the amount of investment with his own resources, give the invested money as a *mudarabah* to a third party, and invest it in a partnership with a third party. The agent may practice all of these things because these are the customary practices of a merchant. He may not however provide a loan, because a loan is viewed as a favour on the part of the lender, and not as a commercial transaction from which some advantage can be expected⁹.

In the case of a *mudarabah* contract with a limited mandate, the agent's freedom of action is somewhat restricted, especially with respect to transactions with third parties as mentioned above. In addition, the investor could impose a

⁸ Al-Jarhi, op.cit. p. 10.

⁹ Udovitch, A., *Partnership and Profit in Medieval Islam*, Princeton University Press, 1970, p. 204.

variety of specific restrictions which could appear in a limited as well as in an unlimited mandate *mudarabah* , and could be related to location, object, or methods of trade.

The medieval Islamic commercial institution of *mudarabah* is viewed by Islamic economists and jurists as being important to the economic life of society. The owner of capital may not find his way to profitable economic enterprise, and the person who can find his way to such an activity may not have the capital. Capital and enterprise play an important role in attaining prosperity. The *mudarabah* contract is essentially a profit sharing contract which has the implication of transforming labourers into entrepreneurs.

3.4. Modern Applications of the Profit-Loss-Sharing System and the Ethical Basis for Contemporary Adoption

When *mudarabah* was used during the early years of Islam, the number of investors was limited, the size of capital was small, and technology allowed for simple commercial, agricultural and manufacturing ventures. However, the form of *mudarabah* as a PLS company is easily adaptable to quantitative as well as qualitative changes.

Contemporary conditions require a creative institutional framework, within which the PLS company arrangement can develop to face the challenges of a huge number of investors, enormous financial resources, and ever expanding technological frontiers.

The method employed in adopting medieval financial practices to modern banking and investment is to modify modern institutions so that they embody the principles implicit in the former. These principles can be summarized in the following four important ones. First, risk-taking, when related to a commercial enterprise, is a socially productive economic activity and, consequently, entitled to a reward. Second, a related point is that loans created are to finance socially productive economic activity. Third, financial risk rests solely with the lenders and not with the managers and agents. Fourth, interest is prohibited because it

is a predetermined fixed sum due to the owner of loanable funds irrespective of the outcome of the business enterprise which makes it tantamount to a contract involving *riba*¹⁰.

In order to develop a description of contemporary Islamic banking and its adaptation of ethically based financial practices, the following sources were used. First, there are numerous studies in articles and books on the issue, which started appearing, as early as the 1940s. These studies began to be taken seriously in the Middle East in the early 1970s, where several Islamic banks and investment companies were formed. The second source of information is found in the organizational reports of these institutions. Third, published and unpublished literature written mainly for academic seminars and national and international seminars on Islamic banking provide an ample source of information. In this section, the discussion will mainly concentrate on some applications of *mudarabah* under banking and non-banking arrangements.

A- Banking Arrangements

Banks here are meant to be a particular kind of financial companies which include the acceptance of deposits. They are capable of providing certain services, e.g., bank guarantees, letters of credit, etc. Banks therefore carry out the same functions of financial intermediation which finance companies undertake.

On the demand side, banks can obtain funds through selling stock as well as taking investment deposits. The latter can be done either directly or through marketing investment (general and specific) certificates. These certificates have the same characteristics as those issued by a finance company. On the supply side, banks can finance investment through purchasing stock, direct placing of funds, and purchasing of investment certificates issued by financial and non-financial companies.

¹⁰ El-Badour, R. I., 'The Islamic Economic System: A Theoretical and Empirical Analysis of Money and Banking in the Islamic Economic Framework', unpublished Ph.D dissertation, Utah State University, Logan, Utah, U.S.A., 1984, p. 135.

B- Non-Banking Arrangements

Generally speaking, people can channel their savings to investment directly through either fund placement or shareholding.

(1) Fund Placement:

A saver can place his funds directly with an investor who could be an individual business or a company, both working in trade, production, or services. This form is a straightforward *mudarabah* contract which would satisfy the necessary conditions mentioned above.

In an Islamic economy, it should be permissible for individual and corporate business concerns to accept investment deposits. These are funds placed with such institutions for investment purposes according to the rules of *mudarabah*. These deposits can be collected against deposit certificates which can be standardized legally into two forms:

a- General investment certificates.

b- Specific investment certificates.

Such certificates can be issued in various denominations and maturities. They would be tradable, which would create a secondary market for them.

(2) Shareholding:

Savers can hold stock in companies which carry out investments themselves directly, or in companies which place funds with other direct investors or hold stock in companies, i.e., financial and holding companies.

3.5. Financial Intermediation

It is clear that trade, production and service companies would be attracting funds of a maturity structure suited for their own operations. Finance and banking institutions, meanwhile, have to accept funds in the maturities desired by savers, which may not be best suited for the maturities demanded by investors. It is therefore a common complaint that a finance or a banking institution has to

attempt to balance the generally shorter maturities on the saving side with the generally longer maturities on the investment side¹¹. This is usually done through producing a financial asset (an investment certificate) of higher quality than could be produced by the individual saver, for the same maturity. However the higher quality of financial assets will not assist in transforming shorter (saving) maturities to longer (investment) maturities without an effective secondary market.

3.6. The Effects of a Profit-Loss-Sharing System on Savings and Investment

Banks and other financial institutions can contribute to the economic development of a country by providing a market for savers and investors in which their complex needs are matched. Savers keep their wealth in various form of real and financial assets. Depending on the individual preferences, assets (and liabilities) must have certain features of safety, liquidity, and yield. In developing countries, savers usually hold a large part of their non-financial wealth in the form of land, livestock, inventories (e.g. foodstuffs), and to a certain extent in durable consumer goods. Wealthier individuals, but sometimes even poor people, hold valuables such as gold and jewelry. The share of productive capital goods is relatively small in comparison with non-productive assets in total wealth.

Financial institutions can change the composition of savers wealth by offering certain financial assets that correspond better to the needs of savers in terms of liquidity, security, and yield. It may be less risky and cause less transaction cost to hold savings in monetary form rather than in real goods. Banks transfer the assets attracted to investors who then use the funds for income yielding investments. Without financial intermediation, savers would probably channel a smaller volume of funds directly to investors because of a preference for safe and liquid assets. Financial institutions can therefore reconcile the needs of savers and investors through the transmutation of relatively safe, liquid, short-term financial claims into riskier, less liquid, long-term real assets.

¹¹ Al-Jarhi, op.cit. p. 20.

The financial system thereby improves the allocation of scarce resources and enables a faster development of the economy¹².

The introduction of financial intermediation based on the PLS principle has potential impacts on the behavior of savers, banks and investors. Theoretically speaking, it can be asked whether the adoption of a PLS system may lead to a reduction of savings and retardation of financial intermediation and development. Increased uncertainty in the rate of return is one argument that supports this assertion. The few studies that have considered the question have tended to compare the effects on savings of a fixed and certain rate of return with those of an uncertain rate of return, implicitly assuming the same mean rate of return with greater variability. The result, obviously, shows a reduction in savings. The conclusion, however, is far from obvious when both risk and return are allowed to vary.

The results of an analysis in which risk and return variability have both been taken into account depend on assumptions regarding the form of the utility function and its risk properties, for example, the degree and the extent of risk aversion, the degree to which the future is discounted, whether or not an increased risk is compensated by a higher return, and finally the income and substitution effects of the increased uncertainty. It has been shown, for example, that when future non-capital income is subject to risk, decreasing temporal risk aversion is a sufficient condition to increase the uncertainty about future income and to decrease consumption and increase savings. With respect to capital income, the combined substitution and income effect of increased uncertainty is shown to be indeterminate. Other studies have shown that under reasonable assumptions, in the face of uncertainty, households will increase their savings as a precaution.

Theoretical analysis has not, therefore, provided a clear-cut testable hypothesis in this regard, and it becomes an empirical question whether saving will increase or decrease in an Islamic system. It can however, be reasonably expected that "a rational planner may make more provision for the future when the future

¹² Gurley, J. G. and E. S. Shaw, 'Financial Intermediaries and the Savings-Investment Process', *The Journal of Finance*, Vol. XL, No.2, May 1956, pp. 257-276.

becomes more uncertain”.

There is no strong theoretical reason to believe that on balance savings will decline as a result of introducing an Islamic economic system¹³. However, the PLS system turns savers into entrepreneurs, at least to some extent, by encouraging them to participate directly in the financial success of the investor's business, thereby also sharing the risks involved. The type of uncertainty a saver then faces in an Islamic financial system differs from the one of a traditional banking system. In the latter the expected yield depends on the nominal rate of interest banks offer on various forms of term deposits and on the expected rate of inflation. While the nominal rate of interest is fixed, uncertainty arises from the fact that the actual inflation rate may differ from the rate expected at the time the act of saving took place.

In an Islamic banking system not only is the expected rate of inflation a risky variable, but so also is the nominal yield on an investment deposit. Therefore the riskiness of the expected real yield of an investment deposit consists of two components: uncertainty concerning the ex post nominal return that will be received and uncertainty concerning the inflation rate. If these two sources of uncertainty are independent, then it is clear that the aggregate uncertainty of the real yield on bank deposits will be greater under a PLS system than under a fixed interest system.

Where an Islamic banking system works side by side with traditionally operating banks, the effects on savings are unambiguously positive, since the menu of savings instruments is expanded, and no existing savings outlet is eliminated. Savings attracted into PLS accounts will include not only existing savings from other assets, but also savings of individuals who either had a religious inhibition concerning the use of the traditional banking system, or who consider the economic characteristics (risk, return) of the new assets sufficiently superior to the old ones to induce additional savings.

¹³ Iqbal, Z. and Mirakhor, A., 'Islamic Banking', *Al-Tawhid, A Quarterly Journal of Islamic Thought & Culture*, Vol. IV, No. 3, April-June 1987, pp. 90-145.

In terms of bank's relations with borrowers, a PLS system clearly involves more direct involvement. It is to be expected that banks would require more information about the business activities they finance, and would be more likely to seek to influence the business decisions of borrowers. To some extent, the enhanced role of the banks could be used to improve the skills of investors. Especially in small business and agriculture, banks could provide information and expertise that increases the profitability of investments. They could also support entrepreneurs by providing technical and managerial assistance. Moreover, banks within the framework of the PLS system are entrepreneurs themselves which can influence business decisions positively. Therefore, possibly negative effects on the investor's willingness to accept risks because of thorough credit supervision might be compensated by the comprehensive support provided by Islamic banks. Lastly, in sharing losses as well as profits, banks could function as absorbers of shocks stemming from the real sector and thereby reduce the cost of adjustment¹⁴.

For reasons given above, it seems likely that the administrative resources required to operate a PLS system effectively would be greater, though it is hoped that the resulting higher costs could be offset, or more than offset, by an improved allocation of investment. Concerning the latter, greater involvement by institutional providers of funds in the uses to which such funds are put should probably have a positive effect.

3.7. Conclusions

The *mudarabah* is of great importance to the economic life of the people, for the owner of capital may not find his way to profitable economic activity, and the person who can find his way to such activity may not have the capital. Prosperity cannot be attained except by means of both of these, that is, capital and economic activity. By permitting this contract, the goal of both parties is attained.

¹⁴ Karsten, I., 'Islam and Financial Intermediation', *IMF Staff Papers*, December 1981, pp. 19-23.

Moreover, this form of business organization has a very healthy effect on the position of the labourers. They feel happy and satisfied for they share the profit. They even work harder because every increase in the gross profits increases their share of it. It is, therefore, a very successful and popular form of business organization.

CHAPTER FOUR

MUSHARAKAH (EQUITY PARTICIPATION) AND OTHER FINANCIAL INSTRUMENTS OF ISLAMIC BANKS

Introduction

In the contemporary world there is always a dilemma for the entrepreneur who has a promising idea for a new venture. How is he to raise the capital necessary to launch the venture? Borrowing the money is probably out of question. If the normal interest rate is 6% but the venture has a 10% chance of failing within a year, the lender will probably charge interest at a rate of 16%. High interest, plus amortization, will impose heavy fixed costs on the venture from the outset and this will increase the danger of failure, and in turn the interest rate. Moreover, if the venture's prospects can not be predicted with reasonable confidence, it will be very difficult even to calculate an appropriate interest rate. The alternative must be for the entrepreneur to admit a partner to the business who is entitled to receive a portion of profits from the venture, if any, in exchange for contributing the necessary capital to it. The partner's compensation is determined automatically by the fortunes of the business. There is no need to compute an interest rate and there are no fixed costs of debt, the partner will receive his profits only if and as earned.

However, Islam aims at establishing a social order where all individuals are united by bonds of brotherhood and affection like members of one single family. This brotherhood is universal and not parochial. It is not bound by any geographical boundaries and encompasses the whole of mankind and not any one family group, tribe or race.

The purpose of this chapter is to thoroughly examine the framework for *musharakah* (equity participation) and other financial instruments of the Islamic banks. The chapter is divided into eight sections. The first will define *musharakah* and give its historical background while in the second the different types of *musharakah* will be identified. The third will deal with the conditions of present day *musharakah*

and the fourth analyses equity financing and its channels of investment in an Islamic society. The fifth will identify the steps to be taken to transfer to an equity financing system and the sixth is concerned with the role of equity financing in mobilizing funds and stabilization of the system. The seventh section describes other financial instruments of Islamic banks. Additional subsections are included which examine *ijara* (leasing), *murabaha* (cost plus financing), *qard al- hasanah* (beneficence loans), *bai muajjal* (deferred payment sale), *bai salam* (purchase with deferred delivery) and *tadamun* (solidarity). Finally some conclusions are drawn.

The concept of brotherhood and equal treatment of all individuals in society and before the law is not meaningful unless accompanied by economic justice such that everyone gets his due for his contribution to society or to the social product and that there is no exploitation of one individual by another. The *Prophet* aptly warned: “*Beware of injustice for injustice will be equivalent to darkness on the Day of judgement*”. This warning against injustice and exploitation is designed to protect the rights of all individuals in a society (whether consumers or producers and distributors, and whether employers or employees) and to promote general welfare, the ultimate goal of Islam.

Of special significance here is the relationship between the employer and the employee which Islam places in a proper setting and specifies norms for the mutual treatment of both so as to establish justice between them. An employee is entitled to a “just” wage for his contribution to output and it is unlawful for the employer to exploit his employee.

4.1. Definition of Musharakah & Its Historical Background

Musharakah or *shirkah* can be defined as a form of partnership where two or more persons combine either their capital or labour together , to share the profits, enjoying similar rights and liabilities.

From the very inception of human society, the methods to meet day to day needs have been changing with the change of social, economic, scientific, cultural and political circumstances, especially habits, fashions and the standard of living.

These methods regulate the commercial activities and vary from place to place and time to time. The Arab society at the time of the rise of Islam had very simple financing methods and forms of business peculiar to that society.

The advent of the Holy Prophet saw the practice of *musharakah* already prevailing over the commercial activities in Arabia. He not only ratified it, but also himself did business on the basis of *musharakah*¹.

After *Hijra*, the *muhajireen* and the *ansar* were declared by the *Prophet* to be brothers. Subsequently they joined as partners, in the form of *musharakah*, *muzara* and *musaqat*, in their trade and commerce. The nature of the transaction, in the different forms, is identical. The different nomenclature in arabic refers to diverse activities such as *muzara* in agriculture, *musaqat* in gardening and *musharakah* in trade. The *musharakah* of capital and labour is called *mudarabah*. These four forms were so developed that they became independent institutions and the jurists formed detailed rules about them. There is a consensus of opinion among the jurists of all schools of thought (including *Hanfia*, *Maleki*, *Shafei*, *Hanbali* and *Shia*) that *musharakah* is a valid and legitimate contract in Islam. The jurists, however, differ over its form, conditions and other details.

4.2. Types of Musharakah

Originally *musharakah* or *shirkah* (Partnership) was of two types, namely,

(a) *Shirkah al-milk* (non-contractual partnership)

(b) *Shirkah al-uqood* (contractual partnership)

Shirkah al-milk (non-contractual) implies co-ownership and comes into existence when two or more persons happen to get joint-ownership of some asset without having entered into a formal partnership agreement; for example, two persons receiving an inheritance or a gift of land or property which may or may not be divisible. The partners have to share the gift, or inherited property or its income, in accordance with their share in it until they decide to divide it. If the property is divisible and

¹ Irfani, A. M., *Musharakah and its Modern Applications*, Paper presented at the Seminar on Islamic Financing Techniques, Islamabad, December 1984, p. 2.

the partners still decide to stick together, the *shirkah al-milk* is termed *ikhtiyariyyah* (voluntary). However, if it is indivisible and they are constrained to stay together, the *shirkah al-milk* is characterised as *jabriyyah* (involuntary).

Shirkah al-uqood (contractual partnership) can, however, be considered a proper partnership because the parties concerned have willingly entered into a contractual agreement for joint investment and the sharing of profits and risks. The agreement need not necessarily be formal and written, it could be informal and oral. Just as in *mudarabah*, the profits can be shared in any equitably agreed proportion. Losses must, however, be shared in proportion to the capital contribution.

Shirkah al-uqood has been divided in the *fiqh* books into four kinds: *al-mufawadah* (full authority and obligation); *al-inan* (restricted authority and obligation); *al-abdan* (labour, skill and management); and *al-wujuh* (goodwill, credit-worthiness and contracts).

In the case of *mufawadah* the partners are adults, equal in their capital contribution, their ability to undertake responsibility and their share of profits and losses. They have full authority to act on behalf of the others and are jointly and severally responsible for the liabilities of their partnership business, provided that such liabilities have been incurred in the ordinary course of business. Thus each partner can act as an agent (*wakil*) for the partnership business and stand as surety or guarantor (*kafil*) for the other partners.

Inan on the other hand implies that all partners need not be adults or have an equal share in the capital. They are not equally responsible for the management of the business. Accordingly their share in profits may be unequal, but this must be clearly specified in the partnership contract. Their share in losses would of course be in accordance with their capital contributions. Thus in *shirkah al-inan* the partners act as agents but not as sureties for their colleagues.

Shirkah al-abdan is where the partners contribute their skills and efforts to the management of the business without contributing to the capital.

In *shirkah al-wujuh* the partners use their goodwill, their credit-worthiness and

their contacts for promoting their business without contributing to the capital². Both these forms for partnership, where the partners do not contribute any capital, would remain confined essentially to small-scale businesses only.

These are of course models. In practice, however, the partners may contribute not only finance but also labour, management and skills, and credit and goodwill, although not necessarily equally.

4.3. Types of Modern Musharakah and its Conditions

The modern business concerns being run on the basis of *musharakah* (as defined above) are as under:

1. Partnership: It is regulated by-

(a) Partnership rules framed by the government,

(b) Business practices prevailing in the business community.

2. Limited company. This type of *musharakah* is strictly controlled by the statutory rules framed by the government. Its commercial activities are, however, influenced by the business practices (*urf*).

3. Co-operative societies. This *musharakah* is also governed by statutory rules. Its commercial activities are influenced by the practices prevailing in the business community.

The above modern *musharakah* principally resembles *shirkah al-inan*. The details are, however, considerably different due to change of *urf* and other factors including modern commercial techniques, economic conditions and legal requirements. Let us discuss briefly the conditions of *musharakah*, which are those of *shirkah al-inan*. Other types of *musharakah* mentioned by jurists are nearly obsolete nowadays.

Capital to be invested by the partners may be unequal. For the majority of the jurists the capital should be in the shape of currency and not in the shape of goods.

² Chapra, M. U., *Towards a Just Monetary system*, The Islamic Foundation, Leicester, 1985, p. 251.

The condition for capital to be in the form of currency only was imposed when it was difficult to refer to the goods in terms of currency. This was true in the days of barter systems when the jurists framed the rules, but now goods are generally referred or accounted for in terms of currency. This condition should, therefore, be waived. In limited companies and co-operative societies the capital is invested in the form of equal units of currency called shares and the intended partners buy as many shares as they wish. This practice has universally been accepted as *urf* and is therefore according to Islamic principles.

4.3.1. Management

Musharakah is run and managed by the will and equal rights of participation of all the partners. Different aspects of *musharakah* business are as follows :

1. Every partner is an agent for the others, as all the partners benefit from the *musharakah* business. When a contract of *musharakah* is made the condition of agency is automatically presumed to be in existence in the contract. The actual possession of a partner over a property of the *musharakah* business is considered as possession of other partners in as much as if a partner purchases half portion of a specific good for himself and half portion thereof for the *musharakah*. When he takes possession of that specific good, this possession will be considered as possession of all the partners. If, however, a partner purchases some goods for himself only, it is exclusively for him and not for the *musharakah* business.

2. Every partner enjoys equal rights in all respects in the absence of any condition to the contrary.

3. Any condition regarding participation in and administration of the *musharakah* and variation in the share of profit on this ground is valid. The contract of *musharakah* is not invalid on grounds of a condition of non-participation in the *musharakah* business, but on the ground that a share in the profit exists.

4. Every partner has a right to participate actively in the affairs of *musharakah* if he wishes.

In all modern forms of *musharakah*, the partners have equal rights as mentioned above. In the limited companies and cooperative societies the shareholders delegate their powers (rights in respect of administration etc.) to some among them to be called directors or given any other appropriate title. In a partnership concern the partners, by a mutual agreement, distribute among themselves their responsibilities, duties and jobs. As mentioned above these practices are valid being *urf* of business community.

4.3.2. Distribution of Profit

The basis for entitlement to the profits of a *musharakah* are capital, active participation in the *musharakah* business and responsibility. Profits are to be distributed among the partners in business on the basis of proportions settled by them in advance. The share of every party in profit must be determined as a proportion or percentage. No fixed amount can be settled for any party³.

Limited companies and co-operative societies distribute their profit according to the capital of share-holders. If any share-holder participates actively in these modern *musharakah* he is paid for it and such payments are regarded as the expenditure of *musharakah*. This is modern *urf* and there is nothing un-Islamic in this *urf*.

4.3.3. Liability of Loss

All the jurist are, unanimously, of the view that the loss shall be borne by the partners according to their capitals. In all forms of *musharakah* (i.e. limited companies, co-operative societies and partnership) the loss is borne on the basis of capital invested.

There can be little doubt, after the citations above, of the unanimity of the principle. The jurists have categorically laid down that a party which has no capital invested in an enterprise, does not have to share its loss. From the explanation of the jurists, it is clear that it is not possible, after investment of capital, to avoid

³ Siddiqi, M. N., *Partnership and Profit-Sharing in Islamic Law*, The Islamic Foundation, Leicester, 1985, p. 22-23.

the risk of loss in the enterprise. This is a direct consequence of the prohibition of interest in Islam and is of fundamental importance for our analysis. The jurists point out that this is because of the fact that loss means destruction of a part of the capital and hence, as it occurs, is a liability of the owner of capital alone.

However, according to modern commercial practices the loss does not cut down the respective capitals of the partners or share-holders, but remains as it is in the accounts books of the *musharakah* in order to be adjusted against the future profits. It is pertinent to note that while adjusting the loss against future profits the accounting procedure automatically works in a manner so as to bear on the capitals subsequently.

4.3.4. Withdrawal of Members

In the early days of Islam the *musharakah* were generally formed on a short term basis, mostly of a joint venture type. It was, therefore, quite easy for a partner to withdraw from a *musharakah*. The withdrawal did not create many problems such as the taxation of capital expenditure, the continuous nature of business activities and goodwill. This is why the old jurists did not feel any need to impose restrictions on the withdrawal of a partner, but in the present complicated commercial practices, legal requirements and public control entangle a *musharakah* for a considerable period so deeply and firmly that no partner or shareholder can be absolved of his liability as such. So according to a modern *urf* the shareholder of a limited company cannot withdraw from it and receive back his capital invested therein. He can, however, sell his share to any person desirous of becoming a shareholder of that company. In a partnership business a partner can be permitted to withdraw and receive his capital back after fulfilling his liabilities as a partner according to terms and conditions settled between the partners.

4.3.5. Limited Liability

A distinguishing feature of modern *musharakah* (except the partnership) is the limited liability of their shareholders. They cannot be held liable for more than the amount of capital they have invested. This requirement makes it necessary to regard

the *musharakah* as an entity separate from the individuality of the shareholders. This common *urf* has given way to safe and stable *musharakah* resulting in big commercial organizations and flourishing business⁴.

To sum up this section, the *shirkah al-Inan*, which implies unequal shares and is recognised by all schools, may tend to be the most popular. In this case, the profits are divided in accordance with a contractually agreed proportion, since the *shariah* admits an entitlement to profit arising from a partner's contribution to any of the business assets. However, the *shariah* makes it clear that losses are to be shared in proportion to the contribution made to capital. This is because losses, constitute an erosion in equity and must be charged to the capital. If a loss has been incurred in one period, it must be offset against profits in the subsequent periods until the entire loss has been written off and the capital sum restored to its original level. However, until the total loss has been written off, any distribution of "profit" will be considered as an advance to the partners. Accordingly, it would be desirable to build reserves from profits to offset any losses that may be incurred in the future.

The real world situation may be a combination of *mudarabah* and *musharakah* where all partners contribute to the capital but not to the entrepreneurship and management. In this case profits need not be shared in accordance with capital contributions. They may be shared in any proportion agreed to by the partners, depending on their contribution to the success and profitability of the business.

4.4. Equity Financing

Equity financing in an Islamic economy may have to be for either an indefinite period, as it is in the case of the stock of the joint stock companies or shares in partnerships, or a definite (short, medium or long) period as it is in the case of borrowed capital (loans, advances, bonds and debentures). Since borrowed capital would also be on the basis of profit-and-loss sharing and could not be interest-based, it would be in the nature of temporary equity financing and would mature on the expiry of the specified period. Such financing would hence not carry the same

⁴ Irfani, op.cit. pp. 23-24.

connotation as it does in the capitalist economies. It would, like equity capital but unlike *qard al-hasanah*, not enjoy any lien on the assets of the firm.

The inability to secure a lien on the assets of the business financed, possible in the case of interest-based lending, would make the financiers more careful in evaluating the prospects of the business and cautious in providing finance. Moreover, it would be difficult to find medium or long term financing in an Islamic economy without sharing the ownership and control of the business. Expansion of the business would hence be closely related to the distribution of ownership and control. Similarly it would not be possible for anyone to earn an income on savings without being willing to share in the risks of business. Thus ownership, fruits and risks of business would become more widely distributed in an Islamic economy than is possible under capitalism.

There are three types of borrowers who are looking for funds to satisfy their financing needs. These are (i) private sector investors looking for funds to finance their expanding business ; (ii) private sector borrowers seeking funds to finance their consumption needs; and (iii) governments seeking funds to finance their budgetary deficits. Can the needs of all three categories of borrowers be satisfied within the framework of equity financing? It is only the subject of private sector equity finance which is discussed in this section. Whether or not, and to what extent, equity financing can be used to meet the needs of consumers and government are issues which were discussed in Chapter Two of this thesis.

4.4.1. Channels of Equity in an Islamic Society

Islamic banking is equity-oriented and the Islamic instruments of financing would ideally be based on profit and loss sharing. This would bring a fundamental change in the role of Islamic banks and would convert them from creditors to partners⁵.

The channels that equity investment may take in an Islamic society are the same

⁵ . Qureshi, D. M., *The Role of Shariah Based Financial Instruments in a Muslim Country*, Paper presented at the Seminar on Developing a System of Islamic Financial Instruments, Malaysia, May 1986, p. 12.

as elsewhere, namely, sole proprietorship, partnership (including both *mudarabah* and *musharakah* and joint stock companies. Cooperation can also play an important role in an Islamic economy because of its harmony with the value system of Islam and the valuable contribution it can make to the realisation of its goals.

(i) Sole Proprietorship

Generally speaking, the entrepreneur depends essentially in this case on his own finance and management. He may be able to supplement his financial resources by supplier's credits which played an important role in Muslim society in the past and tends to be a major source of short-term capital.

If the sole proprietor needs substantial extra resources on a temporary basis for a specific consignment or profitable opportunities, he may raise the necessary finance from individuals or firms or financial institutions on a profit-and-loss sharing basis, in which case his sole proprietorship will merge into the *mudarabah* form of organisation. If his need for funds is of a permanent nature, he may consider the entry into his business of other partners and take advantage of the *mudarabah* or *musharakah* forms of partnership, depending on whether he needs merely finance or managerial ability as well to complement his own business talent.

What this implies is that an enterprising businessman in an Islamic society need not be constrained in his ambitions by his own finance. He can still expand his business by securing funds on a profit-and-loss-sharing basis. This should actually be better for him as well as the financier in terms of justice; the entrepreneur does not have to pay a predetermined rate of return irrespective of the outcome of his business and the financier does not get a low return even when the business is paying high dividends. Since the ultimate outcome of business is uncertain, one or other of the two parties, entrepreneur or financier, suffers from injustice in an interest-based arrangement and Islam wishes to eliminate injustice.

To sum up the sole proprietorship form of business organisation, along with *mudarabah* financing, needs to be encouraged as it will help achieve the goals of Islam. It provides self-employment, and enables the entrepreneur to stay in his

own town or village, thus helping reduce concentration of population in a few large urban centres.

(ii) Partnership

It is the relationship which exists between two or more persons carrying on a business in common with a view to profit.

The definition provides us with three requirements for a partnership in that there must be a business, that it must be trading (carrying on), and that it must have the capability of making a profit.

Where, at the beginning of a business, one partner provides, say £5,000 in, cash and the other provides the professional skill and expertise to make the venture work it will be a matter for them to decide how the rewards of the business are to be shared out⁶. In the absence of any agreement no interest will be paid on capital, profits will be divided equally and, in the event of a dissolution, the second partner will be required to bear an equal share of any loss of capital, although he will not be entitled to share in the increase in value of capital unless it has been turned into partnership property.

The distinctive features of the partnership is the right of each of the partners to participate in running the firm and it is this right which gives rise to a number of obligations which partners have towards each other. If it is accepted that each partner participates then it is obviously important that there is a sound relationship between them.

Partnership in an Islamic society may take one of two juristic forms, *mudarabah* or *musharakah*. The Islamic jurists have proposed other forms of partnership to provide credit and finance for Agricultural, manufacturing and trading purposes. These are:

(1) Consecutive Partnership

⁶ Smith, P., *Essential Business Law of the Family Business*, Sweet & Maxwell, London, 1979, pp. 10-28.

This instrument of financing is a real innovation on the part of the Islamic banks. The formula is used as a basis for the distribution of profits among depositors, who, in Islamic banks, hold a middle place between shareholders of equity on the one hand and depositors and or lenders on the other. Consecutive partnership formula, practised by all Islamic banks, considers depositors of one financial year as partners in the proceeds of that financial year, regardless of matching between the periods of projects in which their funds were used. Indeed, even some proceeds pending from previous years, for which accruals or provisions were made, are included in the proceeds of the year in question. On the other hand, some yields corresponding to the said financial year are excluded, if they are not yet due, and left to a future year.

Such an accounting system was necessary to reconcile the depositors' need to withdraw funds, regardless of the liquidation of investment in which their funds are used, with the continuity of the bank's investments which constantly flow in a mixed basket, and the need to make regular accounts every financial year, as an accounting unit for this basket.

(2) Agricultural Partnerships

Privately owned agricultural land could be exploited in one of the three ways: (a) directly by the owner, (b) indirectly by renting it (*ijara*), (c) through agricultural partnership.

The two main frameworks in traditional Islamic law for agricultural enterprise are (a) *muzara'a* (share cropping) and *musaqat* (water partnership or tree-sharing). Both these techniques typically afford a partnership between capital and labour.

(a) Sharecropping

Muzara'a (sharecropping or crop partnership) is a contract whereby the landlord puts his agricultural land at the farmer's disposal to farm and the farmer undertakes to give the owner an amount of the agricultural products. This framework is, of course, based on the generally accepted view that there should be a partnership between capital and labour.

(b) Tree-sharing

A contract is termed *musaqat* (water partnership or tree-sharing) when one person strikes a deal with another person calling for the latter to trim and water those fruit trees whose fruits are either one's own, or are at his disposal, in exchange for an amount of the fruits, as agreed upon. If a contract of *musaqat* or treesharing related to fruitless trees, like willows and sycophants, it is not valid. However, it would be valid in such trees as henna whose leaves are used or in those trees whose flowers are used⁷.

(iii) A combination of sole proprietorship and partnership

In practice, business organisations would reflect a combination of sole proprietorship and *mudarabah* or a combination of *musharakah* and *mudarabah*. Not all savers can, or are interested in participating in the management of a business and may be just looking for opportunities to invest their surplus funds for short, medium or long-term periods. They could in this case make financing available to on-going businesses and share in the profits and losses in accordance with agreed ratios.

(iv) Joint stock companies

These constitute along with financial institutions the most convenient form of investment available to a majority of savers, who have neither their own businesses to invest in nor the ability to evaluate running business or become sleeping partners. Corporate shares would be more attractive to them because of the relative ease with which they can acquire them when they wish to invest, or to sell them when they need the liquidity. In the light of Islamic teachings it will however be necessary to reform joint stock companies to safeguard the interests of share holders and consumers, and also to reform stock exchanges to ensure that share prices reflect more or less the underlying economic conditions and do not fluctuate erratically in response to speculative forces.

⁷ Amin, S. H., *Islamic Banking and Finance*, Vahid Publications, Iran, 1986, pp. 34-35.

(v) Cooperation

In addition to the above forms of business organisation, which are all profit-oriented, "cooperation", which is service-oriented, could make a rich contribution to the realisation of the goals of an Islamic economy. With the emphasis of Islam on brotherhood, "cooperation" in its various forms to solve the mutual problems of producers, businesses, consumers, savers, and investors should receive considerable emphasis in a Muslim society.

Cooperative societies could render a number of valuable services to members, including temporary financial accommodation when necessary through a mutual fund, the economies of bulk purchases and sales, maintenance facilities, advisory services, assistance or training for solving management and technical problems, and mutual insurance. Cooperation is a mutually beneficial relationship for all concerned, and everyone's participation is completely voluntary⁸.

Informal cooperation between craftsmen and businesses is quite widespread in Muslim history. In all these forms of informal cooperation, businesses rendered services to each other without receiving any profit, commission or remuneration. These different forms reflected not only Islamic brotherhood and mutual trust but also fulfilled the common needs of businessmen on a mutually cooperative basis.

Historical experience has shown that during the *jahiliyah* (pre-Islamic) period, trade (over many territories) stretched over long distances and all financial resources were mobilised on the basis of either interest or *mudarabah* and *musharakah*. Islam, however, abolished the interest basis and organised the entire production and trade on the basis of *mudarabah* and *musharakah*. With the abolition of interest, economic activity in the Muslim world did not suffer any decline. In fact there was increased prosperity.

A combination of several economic and political factors, including the ability to mobilise adequate financial resources, were responsible for this prosperity. All these

⁸ Hessen, R., 'The Modern Corporation and Private Property: A Reappraisal', *Journal of Law and Economics*, Vol.XXVI, June 1983, p. 287.

factors together provided a great boost to trade which flourished from Morocco and Spain in the west, to India and China in the east, Central Asia in the north, and Africa in the south. Therefore, the economic prosperity in the Muslim world had made possible a development of industrial skill which brought the artistic value of the products to an unequalled height.

Mudarabah and *musharakah* were the basic methods, by which financial resources were mobilised and combined with entrepreneurial and managerial skills for purposes of expanding long-distance trade and supporting crafts and manufacture. They fulfilled the needs of commerce and industry and enabled them to thrive to the optimum level given the prevailing technological environment.

4.5. Steps to be Taken to Transform to an Equity Financing System

It was mentioned earlier that to abolish interest implies that all businesses in Muslim countries, including industry and agriculture, currently operating on the basis of a mix of equity and interest-based loans, would have to become primarily equity-based.

This requires that all financial needs of a permanent nature, whether for fixed or working capital, should normally be expected to come out of equity capital in an Islamic economy. This broader equity-capital base may be supported to the extent necessary by medium-and long-term *mudarabah* advances. Short-term loan financing, even though in a profit-and-loss sharing framework, may be resorted to only for bridge-financing or temporary shortage of liquidity resulting from seasonal peaks in business for which purpose it may not be desirable or feasible to have a permanent increase in equity.

A number of steps would need to be taken to bring about the transformation to an equity-based financing system in the gradual Islamisation of the economy of Muslim countries.

Firstly, projects should be selected for funding through partnerships primarily on the basis of their expected profitability rather than the creditworthiness or

solvency of the borrower⁹. This factor, together with the predominance of equity markets and the absence of debt markets, has led Muslim scholars to conclude that, potentially, in an Islamic system, there would be : (a) a greater number and variety of investment projects that would be seeking financing; (b) a more cautious, selective, and perhaps more efficient project selection by the savers and investors; and (c) a greater involvement by the public in investment and entrepreneurial activities, particularly as private equity markets develop.

Secondly, to enable firms to increase their equity it may be necessary to "regularise" the existing stock of "black" money (arising from tax evasion), the major outlet for which currently is mainly capital outflows or conspicuous consumption. This move should help draw a substantial volume of such funds into the fold of investment. Without this move it may be difficult to increase equity because there may not be a sufficient volume of "white" money in the economy for this purpose. In the next chapter we will be discussing this issue in the context of the middle east stock markets.

Thirdly, tax laws should be revised to treat interest payments in the same way as dividends and profits are now being treated, and taxes should be levied on gross profits before interest payments. In fact, it would be desirable to impose a higher rate of tax on the interest portion of the gross income than that applied to profits to accelerate the transformation to an equity-based financing structure.

Fourthly, the tax structure of Muslim countries should be streamlined to ensure that it does not discourage investment and channel even legally earned profits into "black" money. While Islam does allow the levying of taxes to a reasonable extent to meet all necessary and desirable state expenditures, it does not permit an unjust tax structure which penalises honesty and creates the un-Islamic tendency of evading taxes.

Finally, the formation of appropriate financial institutions and investment banks should be encouraged to make venture capital available to businesses and industries

⁹ Iqbal, Z. and A. Mirakhor, *Stabilization and Growth in an Open Islamic Economy*, Paper presented at the International Seminar on Islamic Economics, Islamabad, August 1987, p. 5.

and thus enable them to undertake necessary investments. In the process they would also provide investment opportunities to savers who are either unable to find lucrative opportunities, for direct investment, or are unable to locate partners or *mudaribs* for profitable investment of their savings.

4.6. The Role of Equity Financing in Mobilising Funds and Stabilization of the System

Given Islam's emphasis on equity financing, there should be a greater urge to save for investment in one's own business. If there are profitable opportunities for investment which cannot be exploited by reliance merely on internal cash flows, access could be had for premises, equipment and supplies through leasing, *murabaha* or *bai muajjal*, and supplier's credits. Businesses desiring further expansion could also mobilise resources on the basis of profit, *mudarabah* or *musharakah*. Market forces will take care of those who act in a self-defeating manner. Nevertheless, a state-regulated proper auditing system can be instituted to safeguard the interest of investors.

Joint stock companies should also play an important role in an Islamic economy. Their shares would be available to investors who are not active or do not wish to make their funds available to sole proprietors or partnerships. Corporate equities constitute a substantial proportion of total capital formation in capitalist societies.

In an Islamic economy, it is always possible for an individual investor to diversify and reduce his risk by making financial institutions and investment trusts a vehicle for his investment because such institutions diversify their own risk by properly regulating their exposure to different sectors of the economy as do individuals and firms. It must be clearly understood that the return on equity in an Islamic economy will not be equal to just "profit" but will rather be the sum of what constitutes "interest plus profit" in the capitalist economy and is called "return on capital". It will include the reward for saving and risk-taking, on the one hand, and entrepreneurship, management and innovation, on the other.

Hence the Islamic system should be able to ensure justice between the

entrepreneur and the financier. No one would be assured of a predetermined rate of return. One must participate in the risk and share in the outcome of business. This may not necessarily change the total outcome. It would no doubt change the distribution of the total outcome in accordance with the Islamic norm of socio-economic justice. It would also eliminate the erratic and irrational fluctuation between the shares of the savers or financiers and the entrepreneurs. Hence situations where the savers suffer (if interest is low and profit is high) or the entrepreneurs suffer (if interest is high and profit is low or negative) would be eliminated and justice established between the two. The impact of this should be healthy on both savers and entrepreneurs.

When it comes to the question of stability, it must be realized that the stability of any economic system may be evaluated either empirically or analytically. Empirically, the simulation of an econometric model of a given economy has been successfully tried to evaluate stability. The results of such investigations, however, lack the generality of analytical results¹⁰. Furthermore, this approach cannot be employed in the present case since a full-fledged Islamic economic system does not as yet exist.

Analytical methods of examining stability have also been developed by economists and have provided important general results. Such methods have not yet been applied to study an Islamic economy and have in any case their own limitations. More importantly, stability is quite responsive to government action and regulations, hence a definitive analysis requires the specification of several institutional details.

All things considered, there appears to be room for offering some remarks on the stability of an equity-based Islamic economy. The profit in the equity-based system will be dependent on the profit-sharing ratio and the ultimate outcome of the business. The share of the entrepreneur or financier cannot fluctuate violently from month to month. Moreover the distribution of the total return on capital (profit plus interest) between the entrepreneur and the financier would be deter-

¹⁰ Zarqa, M. A., 'Stability in an Interest-Free Islamic Economy: A Note': *Pakistan Journal of Applied Economics*, Vol.II, No.2, Winter 1983, Pakistan, p. 182.

mined more equitably by economic considerations and not by speculative financial market forces. In case of dividends it can however, be reduced in bad times and, in extreme situations, even passed. So the burden of finance by shares is less. There is no doubt that in good times an increased dividend would be expected, but it is precisely in such times that the burden of higher dividend can be borne. This factor should tend to have the effect of substantially reducing business failures, and in turn dampening, rather than accentuating, economic instability. Minsky argues that when each firm finances its own cash flow and plans to invest its own retained profits, there is no problem of effective demand, the financial system is robust and investment has great inertia. When firms can raise outside finance direct from rentiers or through the banks, they are liable to instability. Schemes of investment are planned that are viable only if the overall rate of investment continues to rise. A fragile debt structure is built up. When the acceleration in the rate of investment tapers off, some businesses find current receipts less than current obligations, and a financial collapse occurs¹¹. During a boom, equity holders experience capital gains and increase the ratio of expenditure to income; when the boom breaks, thriftiness increases. Thus, long-run average growth may occur in cycles.

Interest rate volatility has defeated all efforts to restore stability to exchange rates. In a fixed parity system it is impossible to keep the exchange rates pegged because of the movement of "hot" money to take advantage of interest rate differentials. The effort to keep the exchange rate pegged leads to a significant loss of central bank reserves and impairs confidence in the strength of the currency. In a floating exchange rate system, where the rate tries to find its own equilibrium level and fluctuate excessively from day to day in response to international interest rate movements bearing no relationship to underlying economic conditions, it becomes difficult to predict exchange rates. This renders long-term planning almost impossible. A country facing a recession is unable to keep its interest rates low because such a policy leads to an outflow of funds, depreciates the exchange rate of

¹¹ Minsky, H. 'Summary of Minsky's Argument' by Joan Robinson in "What are the Questions"?, *Journal of Economic Literature*, Vol.XV, No.4. December 1977, p. 3331.

rency, and raises the cost of living¹². To prevent an even deeper plunge in the value of its currency, the recession-ridden country is forced to maintain interest rates at a higher level than dictated by the need for recovery. This, in turn, slows down the recovery and undermines confidence in the government.

The elimination of interest and its replacement by profit-loss-sharing would not only change the level of uncertainty but also redistribute the consequences of uncertainty over all parties to a business. It would moreover, by removing the daily destabilising influence of fluctuating interest rates, bring about a commitment of funds for a longer period and also introduce a discipline in investment decisions. In such an environment the strength or weakness of a currency would tend to depend on the underlying strength of the economy, particularly the rate of inflation, and exchange rates. Accompanied by the Islamic emphasis on internal stability in the value of money, exchange rates should prove to be more stable because all other factors influencing exchange rates, such as cyclical developments, structural imbalances and differences in growth rates, are of a long-run nature and influence expectations about long-term trends in exchange rates.

Moreover, in the Islamic system, there will also be a greater interdependence and a closer relationship between investment and deposit yields because banks can primarily accept investment deposits on the basis of profit-sharing and can provide funds to the enterprises on the same basis. Due to the fact that the return to liabilities will be a direct function of the return to asset portfolios and also because assets are created in response to investment opportunities in the real sector, the return to financing is removed from the cost side and relegated to the profit side, thereby allowing the rate of return to financing to be determined by productivity in the real sector. It will be the real sector that determines the rate of return to the financial sector in the Islamic financial system rather than the other way around. For these reasons, Islamic banking tends to reduce the vulnerability of the capital importing country to fluctuations in the level of capital inflows and to a sharp slowdown of new investment due to uncertainty among investors.

¹² Chapra, op.cit. pp. 120-121.

In the Islamic system, no such instability exists when a bank, rather than issuing fixed liabilities, issues shares to its depositors. In this case assets acquired by the banks are transparent to investors, they are no more or less than the deposits supporting them. If there is a decline in the value of the bank's assets then it will not be to the advantage of depositors to withdraw their money because their share would consequently decline. Also the welfare of a depositor does not depend on the actions of other depositors because each gets a share in the bank's value which is independent of whether some withdraw their shares while others do not. In fact there is a greater incentive to remain in the bank when it suffers a decline in the value of its assets because otherwise it will mean acceptance of a loss on initial deposit, whereas retaining shares in the bank will give hope for a revaluation of the bank's assets in the future¹³. Perhaps the greatest advantage of such a system is that it not only resolves the bank's problem of panic among its clients but it also does not require the provision of deposit insurance and other government interventions surrounding banking institutions.

4.7. Other Financial Instruments of Islamic Financing

The Islamic banks are engaged in developing various instruments of financing which not only conform to the Islamic tenets of equity and fairness but will also stand the test of day to day business, corporate needs of the modern world and the sophisticated tools of scientific analysis. The Islamic banks have identified and developed a relatively broad range of business and banking contracts. These include:

4.7.1. Ijara (Leasing) Definition and its Advantages

Ijara means a lease contract as well as a hire contract. In the context of Islamic banking it is a lease contract under which the bank or financial institution leases equipment or a building to one of its clients against a fixed charge.

The primary advantage of *ijara* over the conventional forms of borrowing to finance equipment is that the ownership of the asset remains with the lessor. The

¹³ Khan, W. M., *Towards an Interest-Free Islamic Economic System*, The Islamic Foundation, Leicester & International Association for Islamic Economics, Islamabad, 1985, p. 84.

financing is largely unrelated to the size of assets and the capital base of the lessee and depends principally on the ability of his cash flow to service payments of lease rentals.

Ijara is probably the most suitable means to raise investment funds especially for industries where rapid technological innovation is either underway or desired and for top class firms which are quickly expanding their business or small and medium enterprises and firms which have normally insufficient assets and capital base to meet normal collateral requirements of most other forms of long term financing. The basic security under the *ijara* arrangement is the "ownership of the equipment". The title of ownership to the equipment remains with the leasing company and in case of serious default the equipment is repossessed.

4.7.1.1. The Modern Concept of *Ijara*

Leasing is the modern technique that can be compared with the Islamic technique of *ijara*. Leasing is based on the same fundamental concept of *ijara* according to which one does not have to own an asset in order to enjoy the benefits of it. It is now being applied on a large scale to business activity. There are obvious examples of businesses which have benefitted from their investment in fixed assets over the years. Some businesses have made substantial capital profits from the sale of assets or have been able to improve the look of their balance sheets by the revaluation of assets. In the main, the profitability of a business lies in the use to which the resources are put. It is the use, not necessarily the ownership, which matters. Once a business decision for example the investment appraisal, has been made on some new venture, the choice of purchasing or leasing is partly a matter of arithmetic, partly a question of the availability of capital.

A comparison between leasing and other similar forms of transactions, such as rental, will give a clearer picture. "Rent" as is shown by the rent a car business, is a contract according to which the objects are leased to individuals or a number of users for a much shorter period than their actual useful life¹⁴.

¹⁴ Ghifari, N. M. & Muzaffar, M., *Ijara and its Modern Applications*, Paper presented at the Seminar on Islamic Financing Techniques, Islamabad, December 1984, p. 11-12.

In contract law, the "rental contract" specifies the lease and usage for an indefinite period. A typical example is IBM's computer sales system. This system was initiated by the company which has an over-whelming world market share to promote sales in an attempt to outstrip its competitors, in the belief that it could control the progress of technological innovation of computers. While the users of the equipment leased on a rental system are major enterprises and their usage is continuous, the rented equipment is usually used in a transient manner, whether the case is "rental" or "rent" the lessor is charged with the responsibility for maintenance. Especially, in the case of "rental" the lessor is also charged with the responsibility for coping with the products obsolescence, so that it may be termed a service-oriented business.

4.7.1.2. Economic Role of Ijara

Lease financing because of its special features can supplement the existing conventional forms of financing and further accelerate investment in the private sector.

There is a large requirement of balancing and modernization of the existing industry. As a supplementary source of term credit, lease financing through balancing and modernization of the existing industry, will improve capacity utilization, quality, production cost, profitability, internal generation of cash for future investment and international competitive capability to increase exports.

Lease financing is most suited to the programmes of balancing, modernization and replacement. It would involve a small dosage of investment which would carry relatively smaller investment risk but would result in a quick value added production. It would increase capacity utilization and thus contribute to the growth of the economy.

4.7.2. Murabaha (Cost Plus Financing)

Murabaha is generally defined as the sale of a commodity for the price at which the vendor has purchased it, with the addition of a stated profit known to both the vendor and the purchaser. It is a cost-plus-profit contract. Islamic financial institutions aim to make use of *murabaha* in circumstances where they will purchase

raw materials, goods or equipment etc. and sell them to a client at cost, plus a negotiated profit margin to be paid normally by instalments. With *murabaha*, Islamic financial institutions are no longer to share profits or losses, but instead assume the capacity of a classic financial intermediary.

The legality of *murabaha* is not questioned by any of the schools of law. There are of course differences in the details. However, the use of *murabaha* as a credit vehicle by the Islamic financial institutions has been regarded with apprehension by some Muslim economists, for example M. Siddiqi, who contended that the simple fact that *murabaha* enables a buyer to finance his purchase with deferred payments, as against accepting a mark-up on the market prices of the commodity, means that the financier, in this case the Islamic bank, earns a predetermined profit without bearing any risk¹⁵.

This form of contract is widely used for import finance. So the bank sells a commodity to the client for a predetermined amount or rate of profit over and above the total costs. Usually, goods or commodities are provided to the order of the client according to definite specification, but, following the rules of the *Shariah Supervisory Board* (SSB) (which is established in each bank under the bank's articles of association in order to make sure that each bank's transactions confirm to *Islamic shariah*), the client is not obliged to accept the goods or commodities, even if they are provided according to the given specification.

4.7.3. Beneficence Loans (*Qard al-Hasanah*)

Qard al-hasanah means an interest-free loan, which is the only loan permitted by *shariah* principles. Funds are advanced without any profit or charge for humanitarian and welfare purposes. Repayments are made over a period agreed by both parties. A levy of a modest service charge on such a loan is permissible provided it is based on the actual cost of administering the loan.

One may wonder how lending could be a business proposition once interest is

¹⁵ Saleh, N. A., *Unlawful Gain and Legitimate Profit in Islamic Law*, Cambridge, London, 1986, pp. 94-95.

abolished. It seems that the Islamic financial institutions are advised to make use of *qard al-hasanah* in the following circumstances:

(a) In the case of *musharakah* between the institution and the client, it often happens that not all of the institution's shares in the project can be earmarked for the right to participate in profits; otherwise no substantial share would be left to the other partner, namely the client. Therefore the institution's participation is split into two parts: one constitutes a share in the partnership capital and the other a share in the working capital provided through *qard al-hasanah*.

(b) A *qard al-hasanah* can also be provided to a client of the institution who has cash-flow problems, either in order to protect the institution's investment, or, when the client is reliable, to boost the institution's image and reputation at no great risk.

(c) A third use of *qard al-hasanah* may occur when a client who has with the financial institution a blocked savings account which generates no interest, encounters an urgent need for short-term finance, making recourse to the *mudarabah* concept useless. The necessary funds can be provided to him by the institution through *qard al-hasanah*. There are probably other circumstances where *qard al-hasanah* has its value for the lender; these circumstances will gradually develop with the day to day business of the Islamic financial institutions.

4.7.4. Deferred Payment Sale (Bai Muajjal)

This transaction allows the sale of a product on the basis of deferred payment in installments or in a lump-sum payment. The price of the product is agreed to between the buyer and the seller at the time of the sale and cannot include any charges for deferring payments.

4.7.5. Purchase with Deferred Delivery (Bai Salam)

In this transaction the buyer pays the seller the full negotiated price of a specific product which the seller promises to deliver at a specified future date. This transaction is limited to products whose quality and quantity can be fully specified

at the time the contract is made.

4.7.6. Tadamun or Takaful (Solidarity)

Takaful literally means "mutual guarantee". In the context it is the Islamic answer to the modern concept of insurance, which is one of the most important subjects among scholars. This type of contract represents Islamic insurance based on a collective sharing of risk by a group of individuals whose payments are akin to premiums invested by the Islamic banking institution in a *mudarabah* for the benefit of the group. After a certain period, the group may expect to stop making further payments while remaining insured. The purpose of this solidarity *mudarabah* may be life assurance and it may also be risk insurance covering a property. If the assured person dies before the end of his covered time, or an insured risk on the property materializes, then payment is made out of the account of the insured person; if there is not enough money in that account, the outstanding balance is covered by the money of the other participants inside the same pool. This is what is meant here by solidarity; the participants in a solidarity *mudarabah* share the consequences of a mishap. In other words, the participants in a given solidarity *mudarabah* have the right to share the surplus profits generated by such a *mudarabah* but at the same time they are liable for contributing to amounts in addition to the premiums they have already disbursed, if their initial premiums paid in during a particular year are not sufficient to meet all the losses and risks incurred during that year.

4.8. Conclusions

In this chapter and the preceding one, we have argued that *mudarabah* and *musharakah* are the basic methods by which financial resources are mobilised and combined with entrepreneurial and managerial skills for purposes of expanding long-distance trade and supporting crafts and manufacture. They fulfill the needs of commerce and industry and enable them to thrive to the optimum level given the prevailing resource environment. These financial instruments along with others mentioned in this chapter constitute an important feature of both trade and industry and provide a framework for investment in a modern Islamic economy.

To sum up, an Islamic banking system is essentially an equity-based system in which depositors are treated as if they were shareholders of the bank. Consequently, depositors are not guaranteed the nominal value, or a predetermined rate of return, on their deposits. If the bank makes profits then the shareholder (depositor) would be entitled to receive a certain proportion of these profits. On the other hand, if the bank incurs losses the depositor is expected to share in these as well, and receive a negative rate of return. Thus, from the depositor's perspective an Islamic commercial bank is in many respects similar to a mutual fund or investment trust. Furthermore, to remain consistent with religious strictures, the bank cannot charge interest in its lending operations, but has to use special modes of investment and financing that are also based on the concept of profit and loss sharing system.

No doubt unit trusts and investment trusts are different. The value of shares in an investment trust is determined in the stock market directly. In the case of a unit trust (e.g. the United States mutual fund) the value is based on a weighted basket of the underlying shares which are traded in the market.

With Islamic deposits, it is not the market value which matters, there is none as they are not traded. Nor is it the underlying value of the assets which the bank has invested in unless there are deposits. What is important is the profitability of the investment. Values of shares do not always reflect profitability. Profit/earnings ratios can vary widely, and the market accepts this.

Similarity with unit trusts relates to the uncertainty regarding both returns and the value of Islamic deposits. In practice however value seldom varies, which is not the case with unit trusts where it is determined by the market. In general Islamic deposits are less risky than unit trust holdings. Income oriented unit trusts are most easily compared to the Islamic deposits and not those which are growth oriented. In this regard there is much confusion in the Islamic literature on finance.

CHAPTER FIVE

THE FINANCIAL SYSTEM AND FISCAL AND MONETARY POLICIES IN AN ISLAMIC ECONOMY

Introduction

The main feature of an Islamic financial system is the absolute prohibition of the payment and receipt of interest. Thus, countries that have chosen to bring their economic systems into closer accordance with the rules of the *shariah* have had to restructure their banking systems to conform with the restriction on interest-based financial transactions. In broad terms, an Islamic banking system is essentially an equity-based system in which depositors are treated as if they were shareholders of the bank. Consequently, depositors are not guaranteed the nominal value, or a predetermined rate of return, on their deposits. If the bank makes profits then shareholder (depositor) is entitled to receive a certain proportion of these profits. On the other hand, if the bank incurs losses the depositor is expected to share in these as well, and receive a negative rate of return. Thus, from the depositors' perspective an Islamic commercial bank is in many respects similar to a mutual fund or investment trust.

There is no doubt that the implementation of an equity-based financial system in which any type of fixed rate of return on transactions is excluded raises a number of complex issues. First, it is necessary to develop alternative financial instruments that do not have a fixed nominal value and bear a predetermined rate of interest. There are in fact a number of such alternatives proposed by Muslim economists that satisfy such requirements. Second, there is the question of how monetary and fiscal policies would be expected to operate in an interest-free economy. Clearly, instruments such as monetary policy that rely in any way on the rate of interest would be removed from the arsenal of the authorities, and suitable substitutes would have to be found if monetary policy is to continue to play an important role in Islamic economies. The important question which imposes itself here is: "What

is the conceptual foundation and basic source of guidance for fiscal policy in an Islamic framework”?

The purpose of this chapter is to attempt an analysis of the financial system, fiscal and monetary policies in an Islamic economy. The chapter is divided into six sections. First, we examine how the Islamic banks operate by concentrating only on deposit accounts (savings and investment), we leave aside investment activities like *musharakah*, *mudarabah*, *murabaha*, *bai salam* etc. because these were discussed in the last two chapters. Second, the principal models of Islamic banks will be introduced. The first model relying on the concept of profit-sharing, integrates the assets and liability side based on a principle called the two-tier *mudarabah*. The second model divides the liability side of the bank balance sheet into two windows, one for demand deposits (transaction balances) and the other for investment. Third, the role of the stock market in the Islamic economic system will be highlighted. Fourth, fiscal policy in an Islamic framework will be discussed to show how the new system affects these policies. We will be examining the objectives of the fiscal policy, with *zakat* as a cornerstone of this policy, and the sources of finance for today's Islamic states. Fifth, we point out how the monetary policy can be made to play an effective role with central bank involvement in achieving the goals of an Islamic economy, and finally some conclusions will be drawn.

5.1. How the Islamic Banks Operate

The prime objective of Islamic banks, in general, is to promote, foster and develop the application of Islamic principles, laws and traditions to the transactions of financial, banking and related business affairs and to promote investment companies, enterprises and concerns which shall themselves be engaged in business activities acceptable and consistent with the *shariah*. Such business should not be engaged in the alcoholic beverage trade, the receipt of interest which is forbidden by Islam, gambling or in any other un-Islamic activity.

The Islamic Development Bank has similar objectives except that the Bank's activities are oriented more towards development projects of the member countries

rather than to commercial activities.

Where the normal banking practices do not clash with Islamic principles, Islamic banks have adopted the current banking tools and procedures. Where any clash arises, the Islamic banks have devised their own tools and procedures to undertake their banking activities. Firstly it is appropriate to examine this in relation to deposit accounts only:

Islamic banks receive two types of deposits:

(a) deposits not committed for investment which take the form of current or saving accounts, and

(b) deposits committed for investment which are called investment accounts.

Whereas a current account is operated in the same way as it is operated in the conventional banking system, the savings accounts and investment accounts are operated differently as discussed below:

1- Savings Accounts:

This is an account where the customers can deposit their savings partly to earn income and partly to provide protection against unexpected future expenditures. Therefore, a savings account has to fulfill the functions of an investment account as well as a current account. Since, however, funds deposited in savings accounts will be invested on a profit and loss sharing basis like fixed deposits, they are viewed as part of the investment account. In Pakistan, for example, savings accounts (so-called savings bank accounts) are treated in the same way as fixed deposit accounts; both types of account work on the profit and loss sharing (PLS) principle, though there are differences in the conditions of savings deposits and fixed deposits. The minimum amount required to open a PLS account is, at PRs 100, less than that required for fixed-term deposits¹.

Though these depositors allow the banks to use their money, they get a guar-

¹ Karsten I., 'Islam and Financial Intermediation', *IMF Staff Papers*, Vol. 29, Washington, 1982, p. 115.



antee of getting their full amount back from the bank. In this case, the bank guarantees their savings but is not obliged to pay any rewards to the savers. However, most of the banks are still paying either a cash reward from their profits at the end of their financial year or are giving some privileges to the holders of these accounts, e.g. providing financial support for small projects, loans for the purchase of consumer durables etc. These rewards are not obligatory and are paid only when the bank is earning sufficient profits. We are of the opinion that such practices are not fair. First the customers share in the profit without facing any risk of loss. Secondly the benefits and privileges which savings account holders are entitled to are determined by the bank in a somewhat arbitrary fashion, with no consistency over time or between banks.

2- Investment accounts: can be of two types:

(a) Accounts with authorisation, and

(b) Accounts without authorisation.

In the accounts with authorisation, the account holder authorises the bank to invest his money in any one of its projects. After the expiry of a specified period, the account holder will get the profit. In case of investment accounts without authorisation, the account holder may choose any particular project for investment of his deposited money². The bank will give a share to the account holder from the profit of that particular project which has been chosen by him according to an agreed percentage. If the investment accounts are opened for a fixed period, the customer is not allowed to withdraw his money before the lapse of the specified period. If he does need to withdraw on demand, the customer either is not entitled to the share in profit at all or may be entitled to receive some discounted profit depending upon the duration of the deposit with the bank. These deposit schemes of Islamic banks have been able to attract a substantial number of depositors. This may be so because they have not yet faced a shortage of deposits. But if they do not devise non-usurious tools of raising deposits, then these banks are likely to

² Khan, M. F., 'Islamic Banking as Practised Now in the World', in *Money and Banking in Islam*, Z. Ahmed et al (ed.), Islamabad, 1983, pp. 259-284.

face problems in their growth particularly when they are working side by side with the modern banks. There has been a lot of discussion in the literature on Islamic banking as to how to save the depositors of investment accounts from the risk of the losses that the bank might incur. Islamic economists have suggested a number of schemes such as building reserves by the banks out of their earnings during good times to compensate for losses in bad times or to launch a deposit insurance with the backing of the central bank and the cooperation of all commercial banks and their depositors.

5.2. Principal Models of Islamic Banking

Muslim economists in their efforts to develop models of banking within the framework of Islamic requirements have come up with a variety of proposals that can be categorized into two principal models. The first model, relying on the concept of profit-sharing, integrates the assets and liabilities based on a principle called the two-tier *mudarabah*. This model envisages depositors entering into a contract with a banking firm to share the profits accruing to the bank's business. The bank, on its assets side, enters into another contract with an agent-entrepreneur who is searching for investable funds and who agrees to share his profit with the bank in accordance with a predetermined percentage stipulated in the contract. The bank's earnings from all its activities are pooled and are then shared with its depositors and shareholders according to the terms of their contract. Thus the profits earned by the depositors are then a percentage of the total banking profits. According to this model, the banks are allowed to accept demand deposits that earn no profit and may be subjected to a service charge. This model, though requiring that current deposits must be paid on the demand of the depositors, has no specific reserve requirement³.

The second model divides the liability side of the banks' balance sheet into two windows, one for demand deposits (transaction balances) and the other for investment balances. The choice of the window would be left to the depositors. This

³ Iqbal, Z. & Mirakhor, A., *Islamic Banking*, Occasional Paper No. 49, IMF, Washington. March 1987, p. 4.

model requires a 100% reserve for the demand deposits but stipulates no reserve requirement for the second window. This is based on the presumption that the money deposited as demand deposits are placed as *amanah* (safe keeping) and must be backed by 100% reserve, because these balances belonging to the depositors do not carry with them the innate right for the bank to use them as the basis for money creation through fractional reserves. Money deposited in investment accounts, on the other hand, is placed with the depositor's full knowledge that his deposits will be invested in risk-bearing projects, therefore no guarantee is justified. In this model, too, the depositors may be charged a service fee for the provision of the safe keeping services performed by the bank. On the question of 100% reserve requirement, there is a controversy regarding it in an interest-free banking system. We are of the opinion that such a requirement may impose unnecessary rigidity which will cripple the entire system. Flexibility in this regard is essential.

The second model corresponds closely to the understanding that the early Muslims had of banking and investment practices, and who by the mid-eighth century had developed a variety of credit institutions and instruments such as cheques, documents of debt transfer (*hawala*), and bills of exchange (*suftaja*). Banking services, including currency exchange transactions, were performed by the merchant bankers and investment activities through profit-sharing were accomplished through direct finance.

Both models consider the losses incurred as a result of investment activities by the banks as being reflected in the depreciation of the value of the depositor's wealth. However, both models see the probability of losses minimized through diversification of banks' investment portfolios and careful project selection, monitoring and control. Obviously, the risk to depositors is less in the second model than in the first and is only applicable to investment deposits. More importantly, what will mitigate against risks in the Islamic system is the fact that the banks have direct and indirect control over the behaviour of the agent-entrepreneur through both explicit and implicit contracts. The banks can exert control through both the form of their contract and through an implicit reward-punishment system in the sense

of refusing further credit or the blacklisting of the agent-entrepreneur, and to the extent that the reputation of firms and that of its managers are important, this could be a strong deterrent to irresponsible behaviour.

5.3. The Role of Stock Markets in the Islamic Economic System

The most challenging issue facing the process of implementation of the Islamic financial system is the development of risk-return-bearing instruments that can provide investors a sufficient degree of liquidity, security, and profitability to encourage their holding. Proposals along this line rely on the development of instruments corresponding and parallel to the permissible forms of transactions. These include such instruments as *mudarabah* and *musharakah* certificates, short-term profit-sharing certificates and leasing certificates⁴. Furthermore, proposals are made for the development of specific instruments issued by the central bank as well as by the government, particularly relating to its specific investment projects. Clearly, any instrument representing a position in real assets and having risk-bearing characteristics whose rate of return is variable and tied to the performance of the asset is considered acceptable.

The stock market has today come to occupy an important place in the economy of any country. It is a pool into which surplus funds flow for investment. Most large industries get some of their finances through the stock market. As a matter of fact, the stock market has become the financial nerve-centre of the modern world.

The objective of course would be to establish an institution which would serve the same primary purpose as a modern stock exchange, that is, of providing a place where one may buy or sell shares, but which would be free from the present-day evils and malpractices. For this purpose, we have to evolve an automatic mechanism which will eliminate short term speculation while encouraging investment. The stock exchange, in other words, would have to be so regulated that speculators, in spite of finding the market open to them, would lose any incentive for indulging in

⁴ Al-Jahri, M. A., 'A Monetary and Financial Structure for an Interest-Free Economy: Institutions, Mechanisms and Policy', in *Money and Banking in Islam*, Z. Ahmed & other (eds.), International Centre for Research in Islamic Economics, Jeddah, 1983, pp. 120-131.

speculative activity. A tax on short term capital gains, but exemption for longer term gains may be one possibility. It is desirable to avoid any future crisis like the Kuwait "*Souq Al-Manakh*" crash. That crisis reached such a magnitude that it became impossible for any authority to find a solution that would have satisfied all the parties or remedy the injury⁵.

Given this significance of the stock market in the modern world we have to determine precisely the role the stock market will play in the Islamic economic system. We will highlight the existing form and practices of the market which are consistent with the Islamic principles of finance and identify the changes which have to be brought in others to make them consistent with Islamic principles.

5.3.1. Equity-based Securities

The stock market is dominated by investment and trading in equity-based securities. These investments do not carry a prior return. Rather, such investments carry the chance of loss to the security holder. In order to truly reflect the Islamic spirit, equity investment should meet two other conditions. First, the business must fall in a field of activity prescribed as *halal*. Second, the entire capital structure of the firm must conform to Islamic principles.

5.3.2. Debt-based Securities

A sizeable portion of the capital market consists of debt-based securities including debentures, bonds, preferred stocks and commercial paper. The typical features of these securities are their redeemability, fixed return until maturity, conversion option and negotiability. There is no doubt that such instruments are not compatible with the requirements of *shariah*. Accordingly, a major challenge for the Islamic system is to design new instruments which can successfully replace the existing debt-based instruments.

⁵ Darwiche, F., *The Gulf Stock Exchange Crash, The Rise and Fall of the Souq Al-Manakh*, Croom Helm Ltd, Kent, 1986, p. 112.

5.3.3. Preferred Stocks

Preferred stock is an instrument that combines features of pure debt and common stock. The preference stock holders are accorded preference in dividend distribution and asset distribution in case of liquidation. Besides, at times, the preference stock also includes additional features such as sinking-fund provisions, call provisions, redemption and voting rights.

It appears that the only way to bring the preferred stock within the Islamic fold will be through participation in both earnings, and liquidation proceeds. This will essentially turn such stocks into redeemable equity. A variety of arrangements for proportional distribution of profits and retirement of funds can be adopted to suit the needs of the market.

It may be argued, that after exclusion of debt and preferred stocks the resultant market size will be quite restrictive. This is not true because the existing instruments will be replaced by Islamic instruments. Whether the size of the market will be affected in terms of resource mobilization is an open question.

A class of fixed return contracts approved in the *shariah* is leasing (*ijara*). It is possible to raise leased funds through the stock market. Lease-stocks will offer ownership in the underlying equipment with a known flow of rental income to the holders.

The problem in the case of Islamic banks is that such a market does not yet exist⁶. No one bank can create a market for itself. The creation of such a market needs a combined efforts of the Islamic banks, the monetary authorities of the Islamic countries and their central banks.

5.3.4. Secondary Markets

The development of a secondary market is important and essential to the development of a primary market. All savers, to some degree or other, have a liquidity

⁶ Homoud, S., *Utilization of Funds Generated through Islamic Financial Instruments*, Paper presented at the Seminar on Developing a System of Islamic Financial Instruments in Kuala Lumpur, Malaysia, May 1986, p. 8.

preference. This liquidity preference, although perhaps to a different extent, can exist in an Islamic system as in any other system. To the extent that savers can, if necessary, sell securities quickly and at low cost they will be more willing to devote a higher portion of their savings to long-term instruments than they would otherwise. Since the probability is high that primary securities in the Islamic system would be tied to the projects and management of particular enterprises, there are various risks that must enter into the portfolio decisions of the savers. The risks regarding the earning power of the firm and the risk of its default are examples.

In an Islamic system, more than in any other, both the primary and secondary markets require the active support of the government and the central banks. This is true not only in their initial development and promotion but also in their supervision and control, in order to assure their compliance with the rules of the *shariah*. Particularly in the case of secondary markets, the traders and the markets will need the support and supervision of central banks if these markets are to operate efficiently.

Indeed, an efficient secondary stock market is the only meaningful solution to an all pervasive application of the PLS system. The elimination of a known cost of capital has to be replaced by mechanisms which continuously update the valuation of capital along with the adequate opportunities for risk transfer through trading of ownership interests.

It is essentially needed to bring about rational behaviour into markets and to reduce the erratic movements in stock prices by minimizing speculation. Generally speaking, speculation consists in the forward purchase or sale of stocks on margin without the intention of taking or making actual delivery. Only about 1% of all futures contracts are settled by actual delivery, the rest, about 99%, are liquidated prior to the delivery month by offsetting transactions. In fact it is generally felt that trading in futures contracts is for purposes other than the exchange of titles. The speculator either sells short or buys long. The short seller, popularly called a bear, expects the price of the security sold short to decline and hopes to be able to "cover" his short-sale through an "offsetting" purchase at a lower price before

maturity date to secure a profit. The long buyer, known as a bull, buys stock which he does not want in the hope of making an "offsetting" sale at a higher price before the date of maturity.

While forward purchases or sales of certain agricultural commodities perform an economic function by making an allowance for the time period it takes to produce the goods, thus providing producers as well as users with the assurance that they can sell or receive the goods when ready or needed, the forward market in shares performs no such function. On the other hand, spot purchases against cash payment and the reciprocal receipt of shares do not constitute speculation irrespective of when the purchaser decides to resell them. This is because the spot seller already owns the shares purchased against cash and his decision to resell them will be determined by changes in his economic circumstances or his perception of the market, both of which may, but not necessarily, change immediately.

M. U. Chapra argues that stock market speculation combined with the availability of credit through marginal purchases has in fact contributed to excessive price swings by promoting excessive buying, when prices are expected to rise, or selling, when prices are expected to fall⁷. The claim that speculation helps stabilize prices would be true only if the speculators operated in different random directions and their separate actions were mutually corrective. The claimed stabilizing effect would require that there be no marked disparity in the speculators' purchases and sales. But speculation involves judgement, or anticipation of a rise or fall in prices, and gets accentuated when something happens or some information is available on which judgement can be based. The same events or rumours are likely to result in the same judgements.

In the real world, because of rumours, sometimes purposely spread by insiders and vested interests, there is a wave of speculative buying or selling concentrated in the same direction leading to abnormal and unhealthy fluctuation in prices.

⁷ Chapra, M. U., Comments on the Paper of M. M. Metwally, 'The Role of the Stock Exchange in an Islamic Economy', *Journal for Research in Islamic Economics*, Jeddah, 1985, Vol.3, No. 1. pp. 75-82.

However, counter productive as it is the speculative activity cannot be controlled effectively. Indeed, it is a natural outcome of the divorce between ownership and management and the ease with which such ownership can be traded. Almost every suggestion to curb the activity would involve costs in the form of a reduction in market efficiency. It is a dilemma that the lesser the degree of control the more efficient is the market, but the lesser the control the greater is the risk of market collapse. How then can we eliminate speculation from the stock market? This task cannot be accomplished unless all purchases are for a minimum period say one year. This would eliminate short-term speculating gains (and losses), but would have adverse consequences for liquidity and market depth. Also long term speculation would remain. The problem is that speculative activity can only be identified by examining the motives of the buyers and sellers themselves, not actual transactions in the market.

To sum up there is no doubt that the stock market will play a pivotal role in the Islamic financial system. It will provide the much needed pricing mechanism for assets based on earnings potential. To ensure its smooth functioning, the market will have to be effectively insulated from major shocks or crash. The effects of a major shock would be more pervasive in the Islamic system as compared to the existing system, which is responsible primarily for valuation of equity and only indirectly influences debt valuation⁸. As against this, in the Islamic system entire capital resources, short-term and long-term, are equity based; hence a major shock will have an all pervasive effect on capital valuation.

In fact an operational framework that insulates the market from major shocks is the key to the successful implementation of an Islamic financial system. To this end three areas of market need to be carefully reformed. These are, speculative behaviour in the market (including the prohibition on forward business)⁹, information disclosure standards and the regulatory environment guiding the operations

⁸ Qureshi, D. M., *The Role of Stock Exchange in Islamic Financial System*, Paper presented at the Islamic banking Conference on "Into the 1990's with Islamic Banking : A vision of the Future", London, June 1988, pp. 1-20.

⁹ Khan, M. A., 'Stock Exchanges: Their Functions, and Need for Reform', *The Criterion*, Vol. 7, No. 1, January 1972, p. 35.

and trading practices of the market. It is admitted that even if action is taken on all the three areas mentioned above, instability may remain.

5.4. Fiscal Policy in an Islamic Framework

Economists have recognized for some time that fiscal and monetary policies can be used together to promote balanced economic growth and price stability. Each operates by affecting the aggregate demand for goods and services. An increase in taxes and/or a cut in spending will tend to dampen such demand, as will a lightening of monetary policy. A cut in taxes and/or an increase in spending or an easing of monetary policy, will tend to stimulate aggregate demand.

Thus the term "Policy mixture" refers to the relative emphasis at any one time on fiscal as compared with monetary policy for promoting the nation's goals of economic stabilization¹⁰. Therefore, monetary and fiscal policy are complementary as well as competitive methods of trying to accomplish some specific objectives in economic policy.

The objectives of fiscal policy in contemporary economies are :

- 1- Promotion of a sustained and balanced growth in the country;
- 2- Efficient allocation of resources;
- 3- Improvement in the distribution of income and wealth;
- 4- Attainment of general economic stability, i.e. stability of the general price level as well as full employment¹¹.

Those of monetary policy are :

- 1) Promotion of an adequate rate of economic growth,
- 2) Attainment of stable prices and full employment,
- 3) Achievement of a reasonable equilibrium in the balance of payment.

¹⁰ Walker, C. E., 'Monetary Versus Fiscal Policy', in Mittra, S., *Money and Banking*, Random House, U.S.A., 1970, pp. 515-51.

¹¹ Due, J. F., *Government Finance*, Third edit. Homewood IL: Richard D, Irwin, Inc., 1963, pp. 513-18.

In the case of the less developed countries, the monetary policy needs to be designed so as to make it attractive for the units in the household sector to hold their savings more in financial assets than in physical goods. In other words, if the development process is to acquire momentum, the ratio of fiscal assets to total savings of the household sector must be allowed to grow as fast as possible.

Now it is possible to see the contours of monetary policy emerging. In the early stages of development, when the preference of the surplus-spending unit is to hold their saving predominantly in money, it is not only appropriate but also inevitable that the monetary authorities inject additional money into the system; money creation in such a situation contributes to the acceleration of investment¹².

At a later stage, when the preference pattern of the surplus-spending unit changes in favour of financial assets other than money, the role of money creation tends to decline relatively and a new dimension is added to the monetary policy. To the extent that varied types of financial asset are in demand, the authorities are called upon to initiate the setting up of new financial institutions. Such institutions help not only to satisfy this demand but, in the process of doing so, actually stimulate it even further. Once the financial institutions come into being, they begin to multiply their assets and liabilities at a rapid rate.

However, the fiscal policy is implemented through budgeting (e.g. taxation, deficit financing, public debt, etc.) while monetary policy is implemented through a banking system and a money market (i.e, an open market operation which controls the quantity of commercial bank reserves, the rediscounts, etc.).

In our approach we will analyse first the fiscal policy of an Islamic state due to its importance as a tool to achieve the goal of *shariah* which is the welfare of the people in this world and in the hereafter.

¹² Khatkhate, D. R., 'Analytic Basis of the Working of Monetary Policy in Less Developed Countries', *IMF Staff Papers*, Vol.XIX. 1972, pp. 533-557.

5.4.1. Objectives of Fiscal Policy in an Islamic Economy

The fiscal policy of an Islamic state does not exclude the objectives of the fiscal policies of modern states but it further enlarges them to include the welfare of man and society in the world hereafter. It aims at bringing about a balance between the material, moral, and spiritual needs of man. Hence moral values of Islam have to be incorporated within its fiscal policy. In other words the fiscal policy of an Islamic state has to achieve its objectives within the constraints (limits) set by the *shariah*.

We will examine the conceptual foundation of fiscal policy, as it is understood today, and its operational implications in an economy. One possible approach is to consider the modern objectives of fiscal policy as a starting point and to see whether or not they are in conformity with Islamic principles. This process of analysis can show the difference in conceptual approach between Islam and contemporary economies with respect to objectives and the means adopted to accomplish these objectives. The most important objectives of fiscal policy are :

(1) Economic Growth and Development :

Fiscal policy nowadays, is entrusted with promoting economic growth through mobilizing resources from non-essential consumption and channelizing those resources to investment through improving productivity and by providing incentives to save and invest. Fiscal policy should also create conditions that are conducive to economic growth by designing tax and expenditure policies that have least disincentive for the desire to save and invest and for work effort. Fiscal policy in an Islamic state should not be a retarding factor. Tax and expenditure policies should be geared to serve this purpose and any conflicts that may arise should be resolved.

Most Muslim countries today may be considered as economically developing countries, but this may not always be true. Fiscal policy in case of countries which are still developing will have a primary role to play in raising capital formation. Capital formation encompasses all expenditure that increases productivity and includes investment of the private sector as well as of the public sector. Capital formation in an Islamic state will include investments and development of human

and material resources as well as investment in the development of spiritual and moral values of the people.

Fiscal policy in an Islamic state should aim at achieving full employment of all its resources. All persons who can work should be provided jobs that suit their abilities and in line with *Islamic shariah*. To achieve the goal of full employment of resources the state has to take fiscal and non-fiscal measures that penalize those who keep resources unutilized. Fiscal tools available to Islamic states today are many and may be used to achieve increased productivity. Some of the measures that may activate this goal are;

(a) Shifting resources from non-essential consumption to capital formation. Fiscal policy may achieve this via taxes on lavish consumption or progressive income taxes designed in such a way that they do not have a disincentive effect and do not lead to any distortions in the market system.

(b) An Islamic state has to increase investment and ensure that it is directed to high priority areas. Public investment in particular has to be carefully evaluated and properly managed. The experience of most less developed countries has revealed that, government investment programmes are very often directed to low priority areas or non-viable sectors of the economy due to political reasons. No doubt, such an irrational policy is costly to economies with a limited financial resources.

(c) Natural resources are finite. Their depletion deprives future generations of their use. An Islamic state should be active in conservation of natural resources. For instance the oil rich states should find alternative sources of financing their budgets apart from the oil revenue. The same principle of conservation applies to non oil producing countries and requires the efficient utilization of their natural resources. In case a state makes use of these resources as a source of revenue, then it should rationalize government expenditure and ensure equity with the future generation in mind.

(2) Income Distribution :

Equity is a well-established principle in Islam. In distributing rewards the *khulfai-rashedeen* followed the practice of the *Prophet* by distributing those rewards evenly. This was a clear indication that Islam aims at an equitable distribution of income and wealth and abhors its accumulation in a few hands. Measures taken in the past to redistribute income and wealth in Islamic history are numerous. Most important was the decision taken by *Umar* not to distribute *al-fay* lands to the *sahaba*. This was done in order to prevent accumulation of wealth in a few hands¹³.

Recently many developing countries have sacrificed the goal of equitable distribution of income at the alter of economic growth. Many Islamic countries have joined this band-wagon. The maldistribution in incomes is found to be greater in these countries than in the economically developed countries. Also the system of taxation in these countries are lopsided. The salaried class is easily taxed as is consumption. This is coupled with inefficiency and inadequacy of the whole taxation machinery which makes it regressive and violates the equity criterion. Besides, many of these countries have adopted policies of development oriented towards import substitution and capital intensive techniques in the industrial sector. Development programmes concentrated in urban areas have continuously resorted to deficit financing thereby giving rise to inflation and hyper-inflation.

We are of the opinion that in practice it would be necessary to examine what proportion of national output an Islamic state can raise by way of various taxes, rates, fees, etc., bearing in mind the average per capita income and the distribution of wealth and income in the country. Such an assessment would test the capability of the Islamic fiscal system in its ability or otherwise to bear the burden and responsibilities of the state in the present era.

A salient feature of the Islamic fiscal system is the existence of *zakat* as a separate distributive mechanism. It is an earmarked levy with fixed rates and the budget

¹³ Salama, A. A., 'Fiscal Policy of an Islamic State' in *Fiscal Policy and Resource Allocation in Islam*, Z. Ahmed et al. (eds.) International Centre for Research in Islamic Economics, Jeddah & Institute of Policy studies, Islamabad, 1983, pp. 103-105.

has no control over its rate or categories of recipients. If properly applied it should achieve an equitable distribution of income. Hence, the budget may concentrate on achieving the other sets of goals.

The goals mentioned above for fiscal policy in an Islamic state need fiscal tools. In the past, Islamic states used *zakat* and *kheraj* plus other sources of revenue. These were used to provide for some public services such as defence, education, postal and many others.

5.4.2. Zakat as a Cornerstone of Fiscal Policy in Islam

The symbol of fiscal policy in Islam is *zakat*. In some places *Quranic* verses use the term *sadaqat* in place of *zakat*.

Zakat is a compulsory levy and *sadaqat* is a voluntary charitable contribution. According to one Islamic scholar, *zakat* literally means purification, and it covers the moral, economic, and social spheres. *Zakat* washes away the greed and acquisitiveness of the wealthy, makes them alive to and responsible for solving the problem of poverty. The wealthy are made responsible through the state to ensure that the basic necessities of life are supplied to all the members of society. *Zakat* accordingly purifies wealth itself of its evil tendency towards more and more in fewer hands on account of unequal opportunities¹⁴.

In brief, *zakat* funds can be spent on two categories of individuals: first, on those who have need for the funds such as the poor, the slaves, the debtors for their own needs, and the wayfarers; and second, on administrators of the *zakat* fund, persons whose hearts need reconciliation, debtors who incurred the debts for the benefit of others, and for those who work for the cause of *Allah*. The objectives of *zakat* are many, and all can be related to social causes as well as to economic growth and development.

¹⁴ Abdeen, A. M. and Shook, D. N., *The Saudi Financial System in the Context of Western & Islamic Finance*, John Wiley & Sons, New York, 1984, p. 164.

The basic verse relating to *zakat* is the one which lays down specifically its eight items of expenditure. The verse says:

“Alms are for the poor and the needy, and those employed to administer the (fund); for those whose hearts have been (recently) reconciled (to truth); for those in bondage and in debt, in the cause of Allah; and for the wayfarer (Thus is it) ordained by Allah, and Allah is full of knowledge and wisdom”.
(Quran 9: 60)

Thus, the *Quran* has given the details of *zakat* in a manner which is in keeping with the precepts of fiscal policy and operations according to the science of economics.

It should also be noted that the eight items of expenditure of proceeds of *zakat* can be sub-divided into three broad categories:

a- Items usually known today as “social welfare” meant to improve the distribution of income and wealth (e.g. to the destitute and the needy and those burdened by indebtedness);

b- Items meant for the propagation of Islam, including any expenditure required in the cause of Islam ;

c- Items meant for administration expenditure in connection with collecting and distributing *zakat*.

If these three categories are looked at, it can be seen that the first category relates to an improvement in the distribution of income and wealth, which is one of the objectives of fiscal policy today. The second category seems to cover the promotion of harmony, economic cooperation, and consolidation of the *Muslim ummah*. In fact, the connotation of *zakat* in Islam is different from a “welfare” programme, and *zakat* is different from a “tax” as it is understood today. A tax in a modern society is an obligation of individuals and other entities towards the state, whereas *zakat* is an obligation of a Muslim not only to society and the state,

but also to *Almighty Allah*. *Zakat*, in other words, is not only a “contribution”, but also a “due” or a “claim”. Thus a person paying *zakat* is not doing a favour to the recipient or beneficiary of *zakat*, but is rather meeting a claim on himself¹⁵.

Other collections or taxes in the Islamic system are *ushr* (an agricultural tax), *khums* (a tax at the rate of 20% imposed on what may be described as windfall income .. treasure-troves under the earth), *ghanimah* and *fay* (both obtained after a war in the cause of Islam). The distinction between *ghanimah* and *fay* is that the former is obtained by force, whereas the latter are items left over by enemies voluntarily. In the case of *zakat* which is levied on the surplus of normally hard-earned income, the rate is 2.5%. The rate of tax on agricultural income is 5 to 10%, depending on whether it is an irrigated or non-irrigated farm. Then the rate is as high as twenty percent in case of treasure-troves, minerals, *ghanimah* or *fay*. Thus, a conceptual foundation of the principle of taxation in Islamic fiscal policies emerges clearly.

It is clear that *zakat* works in an Islamic state as a means of providing social security, as a method of redistribution of income and wealth and as a remedy against the concentration of wealth in a smaller section of the society. Thus a broad based system of *zakat* combined with other fiscal tools seems to provide the Islamic state with sufficient means to enable it to bear its responsibilities. An empirical study of the feasibility of such a system in the Muslim countries of today is necessary to provide empirical evidence and support for the theoretical framework.

5.4.3. Sources of Finance for Modern Islamic States

Sources of finance available to contemporary Islamic states are numerous ranging from land taxes, income taxes, indirect taxes, public enterprise user charges, and fees. Taxation does not pose any difficulty from the religious viewpoint. Modern taxes applied on income, wealth and domestic transactions such as sales may not be inconsistent with the Islamic *shariah*.

¹⁵ El-Gousi, A. M., ‘Riba, Islamic Law, and Interest’, unpublished Ph.D dissertation, Temple University, 1982, U.S.A. pp. 251-55.

Taxation could play an important role in the contemporary Muslim societies. Chapra, for example, states that "in view of the goals of social justice and equitable distribution of income a progressive tax system seems to be perfectly in harmony with the goals of Islam"¹⁶. It is agreed that taxation may achieve the following goals:

(1) Curtailing unnecessary consumption; this enhances resources available for capital formation and reduces consumption of some goods which are harmful to health, or domestic industries or the habits and way of life in an Islamic society.

(2) Reallocating resources from investments that have little beneficial effect upon development to those of greater benefit for growth. Cooperation taxes could play such a role; those investing in sectors needed by the nation could be subject to low taxes. Also, resources may be directed to poor regions by means of tax incentives.

(3) Altering economic behaviour by creating incentives to save, to enter the market sector, to utilize resources, and to encourage private capital formation.

(4) Stabilizing the economy by reducing aggregate demand in times of inflation.

Taxation is not always without some adverse effects. If taxes go beyond a certain limit, they become a factor for economic retardation rather than growth. The tax structure in the case of any country must meet equity, economic efficiency, revenue and administrative criteria.

The economic structure in many Islamic countries poses some problems for the tax structure; such as the predominance of agriculture which may necessitate land taxes. It is well known that Japan relied on land tax for its development in 1780. Designing a broad-based tax on the line of *kheraj* may be a break-through for countries endowed with fertile land resources.

¹⁶ Chapra, M. U., *The Islamic Welfare State and its Role in the Economy*, The Islamic Foundation, Leicester, 1979, p. 23.

Other problems are related to methods of assessment where presumptive methods are used when income taxes are applied in the absence of proper accounts. Such methods in many cases contradict the equity criterion, and in many cases, the economic criterion as well. Such methods encourage corruption and also discourage the wide adoption of book-keeping especially where corruption prevails. Also departures from equity arise when personal income taxes effectively reach wage-income receivers compared to its inefficiency to reach business income and incomes generated from capital sources¹⁷. The evasion rate is found to be very high in many developing countries. It was found that one-third of the population of western Nigeria evades taxes. This may be reduced in an Islamic state by emphasising the holiness of the levies, rationalizing expenditure programmes, proper design of levies, and efficient administration of the imposed levies.

The question we are raising is about the priorities to be attached to the various roles which the Islamic state is expected to perform and where savings can be made. It is in this specific area that the Islamic states have failed most. They tend to emphasise defence and this forms a substantial part of the expenditure of the Islamic countries at present. Although it may be possible to save a substantial amount through elimination of waste and corruption, it needs to be seen how much can be saved in this area. In other words what needs to be done is to coordinate all these factors together and to see really how much can be achieved. It is necessary to set up priorities for the functions of the Islamic state and then act according to these priorities. It is also necessary to make adjustment to the system and in the expenditure pattern so as to be able to avoid the inflationary pressures that the system might otherwise generate.

To sum up, sources of finance in an Islamic state must be designed such that they will not impede economic growth. They should generate maximum revenue with least costs in administration and minimum adverse effects on incentives to work, to save and to invest.

¹⁷ Salama, A. A. op.cit. pp. 112-113.

5.5. Monetary Policy and Central Banking

The interest rate, being an important tool for implementing a monetary policy in contemporary western economies, led some Muslim economists to believe that a monetary policy in an Islamic economy will have a relatively limited role. Others believe that a monetary policy can be formulated, in the absence of an interest rate, which can play an important role in achieving different objectives. This can be done if the central bank of a Muslim country adopts means like changing the reserve ratio and directing the control of the supply of credit. These are also used in monetary policy today. Therefore, no discussion of central banking is complete without a reference to a monetary policy. It is the monetary policy formulated by the central bank which provides the basic framework for banking and financial operations in a country.

It is obvious that monetary policy would have to play an important role to help realise the objectives of Islam. A question can be raised regarding the mechanism for equating the supply of money with its demand in the absence of interest as a regulator.

The demand for money in an Islamic economy would arise from the transactions and precautionary needs, which are determined largely by the level of money income and its distribution. The speculative demand for money is essentially triggered by interest rate fluctuations in the capitalist economies. The abolition of interest and the levy of *zakat* would not only tend to minimise the speculative demand for money and reduce the “locking-in” effect of interest rates but also impart greater stability to the total demand for money.

Therefore, liquidity preference arising from the speculative motive should be insignificant in an Islamic economy. The demand for funds for equity-oriented investments would constitute a part of the total transactions demand and would depend on economic conditions and the expected rate of profit which will not be predetermined. Since expectations about rates of profit, unlike those about the rate of interest, do not fluctuate daily or weekly, the aggregate demand for transactions

needs would tend to be relatively more stable. It will be determined primarily by the value of aggregate output, with appropriate weight given to the distribution of income, which will improve gradually in an Islamic economy depending on the extent of the government's commitment to this goal and the policies it adopts for this purpose¹⁸.

Hence the variable in terms of which monetary policy should be formulated in an Islamic economy is the stock of money rather than the level of interest rates. The Islamic central bank should gear its monetary policy to the generation of a growth in money supply which is adequate to finance the potential growth in output over the medium and long-term within the framework of stable prices and the other socio-economic goals of Islam.

While the above approach does recognise the importance of regulating the growth of money supply in the successful management of the economy, it does not necessarily imply a simple monetarist model. There is no presumption that market forces left to themselves will be able to generate sustained non-inflationary growth, remove unemployment, reduce external imbalances and help realise the other desired goals if the growth in money supply is appropriately regulated.

We will be examining the main role of monetary policy and of central banking in an Islamic system. Their chief role would be to take the lead in evolving financial institutions, instruments and yield structures that facilitate efficient mobilization of savings and allocation of resources consistent with the economic development objectives of the Islamic economy. A. R. Hamdi argues that the central banks can also help by adopting selective monetary policies which encourage capital accumulation through Islamic banks (which could be directly related to project finance) by exempting investment deposits of Islamic banks from credit ceiling restrictions¹⁹. In the Sudan for example, all Islamic banks have stopped accepting

¹⁸ Chapra, M. U., *Towards a Just Monetary System*, The Islamic Foundation, Leicester, 1985, pp. 187-189.

¹⁹ Hamdi, A. R., *Trade and Project Finance, Its Strengths & Weaknesses*, Paper presented at the Islamic Banking Meeting on "Into the 1990's with Islamic Banking Seminar", June 1988, London, p. 12.

investment deposits since 1985 because of the credit restrictions. This is a pity as the Islamic banks were proving to be very successful as resource mobilisation agents. A similar case developed in Egypt where an estimated \$12 billion of savings went to Islamic investment companies operating outside central bank jurisdiction rather than established Islamic banks because they were free to invest those funds without credit restrictions (there are also other reasons).

It appears then that governments and central banks can make it feasible for Islamic banks to play an important role in project and development finance in the coming years. Furthermore, the central bank, in particular, must initiate and foster the development of primary, secondary and money markets. The positive relationship between expansion of financial markets and financial development on the one hand and between financial development and economic development on the other necessitates an active participation by the monetary authorities in the evolving financial infrastructure of the economy. For example, monetization of transactions in rural area requires a wider geographical and functional penetration by the banking system. Through the provision of facilities and the expansion of financial markets the central bank can both lower the cost and increase the availability of credit in the economy. Moreover, monetary authorities, through the central bank, can take steps to foster competition between organized and unorganized markets on the basis of profit-sharing and the rate of return in order to enhance the process of integration.

Extension and enforcement of Islamic regulations concerning contracts and property rights in financial and capital markets is needed in order to reduce uncertainties arising from the present structure of rights that tend to discourage private investments. Such enforcement tends to encourage lending of funds on the basis of viability and profitability of investment projects rather than the solvency, creditworthiness, or collateral strength of entrepreneurs. The reduction of uncertainty in the structure of contracts and property rights is desirable because prohibition of interest by itself creates a moral hazard embedded in principal-agent contracts; without a stronger legal framework, such contracts will involve an increase in the

cost of monitoring investments and reduction in overall investment itself²⁰. In fact, one may suggest that the risk in adoption of an Islamic financial system, particularly in the initial stages, is not lower savings but lower investments, if the Islamic rules regarding contracts and property rights are not enforced.

The enforcement of Islamic rules regarding contracts and property rights would increase public confidence in capital markets, financial institutions, and in the process of financial intermediation. This is on the contrary to what is prevailing in the developing economies where we found that some of the regulatory measures in less developed capital markets unnecessarily constrain the scope of the market and also reduce its efficiency. In the Islamic financial system there is no doubt that the increase in efficiency will in turn increase profits and a higher rate of return to savers leading to a virtuous circle and economic development.

Mobilization and financialization of personal savings and diversification of asset preferences of households will require a more variegated pattern of financial assets than that which exists in many Muslim countries today. It should be a function of monetary authorities, through the central bank, to initiate and evolve new financial institutions and instruments which could satisfy and further stimulate demand for assets in the economy. These should also expose investment and savings to the price mechanism via financial intermediation and thus increase the overall efficiency of the saving-investment process.

Performance of the above functions by monetary authorities and the central bank should stress the need for policies to maintain stability in the value of currency. It may be argued that in the current world-wide inflationary climate in most Muslim countries the Islamic imperative of socio-economic justice could be satisfied by indexation, or monetary correction, of all incomes and monetary assets.

²⁰ Iqbal, Z. & Mirakhor, A., op.cit. p. 7.

Proper monetary correction would, however, require the indexation not of income or monetary assets but of purchasing power, which is determined by the consumption and investment pattern of individuals²¹. This position was clearly stated by *Ibn al Qayyim*, an early Muslim jurist, who suggested that currencies were units of accounts whose value "must remain stable without going up or down because if they do like other objects there will be no prices with which to judge other objects". Hence, Muslim writers see monetary policy as playing an active role, not only in maintaining the stable value of the currency, but also in promoting full employment and growth. These objectives should be fostered by monetary and credit policies conducted by the central bank.

Much of the effectiveness of monetary policy in an Islamic economy will depend on which scheme for Islamic banking is adopted. Under a fractional reserve system monetary policy would operate as under a conventional banking system. Such a model, it is argued by A. Mirakhor, would be more costly to maintain or to increase the existing stock of real balances as a result of changes in money supply arising from deposit creation or from substituting deposit and cash²². In the model requiring a 100% reserve, the effectiveness of monetary policy would be weakened, as the central bank would be unable to alter the reserve requirements. To that extent, stabilization targets would have to be realized through control of the monetary base rather than credit.

To achieve its policy objectives, the central bank has to have control over the supply of high-powered money, the reserve ratios on the different types of liabilities, and the maximum amounts of assets which the banks can allocate to their profit-sharing activities. A further opportunity for enhancement of the control over the banking system is available to the central bank through its purchases of equity shares of banks and other financial intermediaries.

²¹ Chapra, M. U., 'Money and Banking in an Islamic Economy' in *Monetary and Fiscal Policy of Islam*, Ariff, M., (ed), International Centre for Research in Islamic Economics, Jeddah, 1982, p. 148.

²² Mirakhor, A., *Some Theoretical Aspects of an Islamic Financial System*, Paper presented at a Conference on Islamic Banking held in Iran, June 1986, Iran, pp. 40-42.

If the central bank decides to purchase these shares, it can persuade their owners to supply them either at the market rate or it may offer a higher rate. These shareholders will receive the prices of their shares in cash from the central bank. Owing to the habits of the people that they generally deposit their capital in banks this cash will ultimately reach the banks. Hence a process of expansion in the supply of capital and its commercial use will ensure the surplus cash in their custody. If there is a demand for capital in the business community, the supply of capital can rise in the economy, due to the funds paid to the shareholder by the central bank when purchasing their commercial share²³. The purchase of shares is an instrument for expansion in the supply of capital, because this has resulted in a supply of new cash to the banks.

In the performance of its regulatory supervisory, and control functions, as well as a lender of last resort, the central bank can continue to exert a substantial influence on the financial system. Moreover, opportunities will exist for the central bank to invest directly in the real sector on a profit-sharing basis, as well as to take equity positions in joint ventures along with other banks. The ability to buy and sell securities in the financial market, that is open-market operations, will still be available to the central bank as long as these securities do not have par value features and non-zero coupon rate.

Additionally, a suggestion has been made that the central bank can regulate profit-sharing ratios between the banks and borrowers on the one hand, and the banks and depositors on the other. Variations in these ratios will change the rates of return and could have the same impact as interest rates on the overall and sectoral flows of financial resources. There is, however, a debate on whether such a policy is valid, since it represents a limitation on the freedom of contract and may be inequitable. The issue of inequity would arise if the profit-sharing rules imposed by the central bank required, say a lower return from profits than the share in losses.

²³ Siddiqi, M. N., *Banking Without Interest*, Islamic Publications Ltd, Lahore, Pakistan, 1980, p. 122.

5.6. Conclusions

The establishment of an economic system based on Islamic values requires fundamental changes in the operations of financial institutions. Fiscal and monetary policy are the most important. The objectives of both policies are similar and overlapping, aiming mainly at the promotion of an adequate economic growth as well as an attainment of greater economic stability, i.e. stability of the general price level as well as full employment.

The use of profit-sharing arrangements in place of interest rates makes commercial banks in an Islamic economy more akin to investment banks. Depositors receive a share of the profits made by the bank, rather than a predetermined rate of interest, and banks in turn receive a rate of return based on profits made by the borrower. Of course, this transformation requires the creation of a variety of financial institutions and instruments that have the profit-sharing characteristics, and some other changes in the system that have been analysed in this chapter.

The stock market will play a pivotal role in the participative financing. The extension of its functions at a much broader level will be helpful in operationalizing the new system. However, there is a need to reform the nature of contracts currently traded, especially the feature of bonds and preferred stock pertaining to rate of return which do not conform to the requirement of *shariah*.

Fiscal policy will be an important economic device in an Islamic state. Past fiscal tools during the Islamic civilization were taxes on land *kheraj*, *zakat* as well as other sources of revenue, social welfare payment and government expenditure policies. Such tools must be used and they may be enhanced with taxes optimally designed to achieve the objectives outlined for fiscal policy in an Islamic state. Sources of finance in an Islamic state must be designed such that they do not impede economic growth. They should generate maximum revenue with least costs in administration and minimum adverse effects on incentives to work, to save and to invest. An equitable distribution of income and wealth is a goal an Islamic state must try to achieve using various distributive measures allowed by Islam. In very

broad terms, the area of fiscal policy in an Islamic state needs further exploration and effort in order to work out a detailed fiscal policy.

The abolition of interest rates, which is an important tool for implementing a monetary policy in contemporary economies, has led some Islamic economists to believe that a monetary policy in an Islamic economy will have a limited role, while others believe that a monetary policy can be implemented as well through other means, such as changing the commercial banks' reserve ratios and directing the controls of the supply of credit.

The central bank should play a vital role (through monetary policy) in the Islamic banking system, because only through its conscientious and creative effort can the Islamic money and banking system achieve its self-actualisation. No doubt, Islamic banking is a new field and until sufficient experience is gained a reasonably cautious policy should be followed. The policy framework evolved for the control and supervision of Islamic banks should be kept under continuous review and changes in policies made as and when considered necessary. Like all central banks, the Islamic central bank should be responsible for the issue of currency and, in coordination with the government, for its internal and external stability.

In conclusion, policymakers in Islamic countries face a number of difficult problems as they move towards transforming their economies to accord with religious principles. There are many issues that are as yet unresolved. These include, among others, the respective roles of monetary and fiscal policies, exchange rate policies, and the effects of changes in the system on savings and investment, and thereby on growth and development.

As to how an Islamic financial system will look like when it achieves all the objectives, suffice it to say that this should not be judged from the current practices of Islamic banking in certain countries. The fact still remains that much progress has been achieved already in implementing Islamic values in the economic sphere. This is a tribute to both scholars and policymakers. However, economists still have much to contribute on the directions of the new system.

CHAPTER SIX

THE MAIN OBSTACLES TO ISLAMIC BANKING AND SOME POSSIBLE REMEDIES

Introduction

There has been a noticeable trend in recent years towards establishing Islamic banks and other Muslim financial institutions in Islamic and even non-Islamic countries. These institutions have been carrying out their business activities on the basis of a profit and loss sharing system. Such a tremendous development is naturally accompanied by a number of problems. The Islamic banking movement should not however lose its momentum. The proper diagnosis of these problems is the first step towards ensuring this does not happen again.

Furthermore, adherence to *shariah* by Islamic banks in the performance of their operations can give them more credibility with the Muslim masses, and strength in dealing with governments and central banks.

In spite of the problems faced by Islamic banks and the difficult environment in which they work, they operate and have managed to make steady, and in certain cases, very fast progress. This is not only reflected in the increasing number of Islamic banks and financial institutions, but also by the size of their portfolios. The assets they manage amount to more than \$12 billion. This relatively fast development was not so much due to the religious sentiment attached to these institutions as to the encouraging nature and results of their financial activities.

This is in addition to the fact that they are still young and their roots, from the point of view of experience, do not as yet strike deep in the soil of economic and business practices. This situation is bound to restrict their role in medium and long term financing, which is commonly associated in the minds of the public with development.

The purpose of this chapter is to analyse the main obstacles facing Islamic banks and the possible remedies. The chapter is divided into ten sections. First, reference

will be made to the recent trend towards establishing Islamic banks and the task and the burden confronting the management of Islamic banks will be highlighted. Second, we will focus on the worries of Islamic banks concerning long term financing and follow up of projects. Third, we will be looking at the issues concerning the profitable placement of surplus liquid funds which some of the Islamic banks, particularly in the Gulf area are facing. Fourth, the moral hazard question and the risk of fraud will be assessed. This is essential because the successful functioning of profit and loss sharing will depend vitally on the existence of a high degree of business morality. Fifth, the central bank regulation with regard to monetary reserves and liquidity requirements will be discussed. Sixth, the planning problems, particularly in developing countries, will be examined especially where government policies cannot be predicted. Seventh, we will examine the question of equity financing which is a highly complex and difficult operation in the third world and will suggest solutions to overcome some of the problems. Eighth, we shall look at the problem of delay in payment and insolvency which an Islamic banks faces and suggest ways to deal with cases of delay in payment. Ninth, Islamic banks in the West and the problems that face them will be examined. Finally some conclusions will be drawn. In each section these problems will be analysed and some possible solutions will also be suggested *.

6.1. Extra Management Burdens

It is generally agreed that management and not capital is the critical factor in the success or failure of projects. Some studies put this factor as responsible for the failure of nine out of every ten new projects in the advanced countries. In the underdeveloped world it is responsible for less failures only because there are other compelling elements like the lack of infrastructure. If banks with their superior resources could provide managerial and technical assistance (together with finance) the rate of project failure would definitely decrease. The banks (and depositors) would benefit, so would the clients and ultimately the society.

* The views expressed in this chapter and elsewhere in the thesis are entirely mine and should not be taken to represent any official views or policies of any organisation. The examples mentioned reflect my personal experience in this field.

There are however, two main tasks confronting the Islamic banks' management:

(First) the protection against "too optimistic" expectations and resulting damages in the banks' proceeds from profit-sharing financing,

(Second) the opening up of new, innovative opportunities for highly profitable profit-sharing engagements.

The traditional commercial bank often can standardize its credit investigations and confine itself to an examination of the securities for credit. But an Islamic bank must make an additional examination of the profit calculations, since its remuneration is not fixed and independent of the entrepreneurial profits but depend on them directly. The problem with these examinations is not so much one of calculation techniques, but one of well-founded knowledge in the huge variety of those markets wherein the fund demanding entrepreneurs intend a future engagement after realizing their investment projects¹.

The prerequisite for meaningful examination of market chances is a very comprehensive entrepreneurial quality in the bank management. The whole management of a general commercial Islamic bank should have qualities of a super entrepreneur acting in a great and ever changing number of markets. It seems however, to be a very obvious assumption that the Islamic banks will, sooner or later, specialize in the financing of investment projects in specified regions and/or in specified branches of the economy.

This specialization probably will have some far reaching consequences. In the first instance, the banks may accumulate intimate knowledge of some markets in which they have concentrated. This may enable the banks to protect themselves more efficiently against "too optimistic" entrepreneurial calculations in these areas, although a perfect protection seems to be impossible. These factors have put the Islamic banks at a disadvantageous position vis-a-vis the interest-based banks in

¹ Nienhaus, V., *Why Islamic Banks Need Top Management: Basic Problems of Islamic Banking in a Capitalistic World and Some Implications*, Paper presented at the First Advanced Course on Islamic Banks of the International Institute of Islamic Banking and Economics, Cairo, August 1981, p. 8.

that the Islamic banks have to supervise and in some cases manage the operation of the project that they are financing. This problem is serious in developing countries where the business enterprises, generally, do not maintain proper accounts or keep different sets of accounts for different purposes².

In Pakistan, where the Islamization of banking is taking place most of the enterprises do not maintain proper sets of accounts, or they maintain multiple sets of accounts to suit their various designs³. Even the accounts of the firms in the corporate sector which are audited by chartered accountants, often fail to reveal their true working results because of the widespread malpractice of deflating profit, inflating losses and showing fictitious expenses. A. Darwish has recently revealed that the Islamic investment companies in Egypt have been announcing remarkable profits, at times amounting to a 20% return on investment. This raised fears that the figures were being inflated to attract new deposits, and that payments were being made from the new funds so attracted⁴. Some of the typical manipulations resorted to by entrepreneurs are:

(1) Overvaluation of opening inventory and (2) overvaluation of assets to inflate depreciation in order to reduce or eliminate the element of profit. In case of lease or hire purchase a separate account will have to be opened for each article financed by a bank as a separate amortization plan will be devised for each article depending on its useful life and other variable factors. Each existing entry shall have to be adjusted and marked off separately.

The presence of such malpractices will raise the cost of Islamic banking. Unless such fool-proof devices are developed that do not entail these extra costs for Islamic bankers, the growth of Islamic banking activities are likely to be constrained considerably.

² Khan, M. F., 'Islamic Banking as Practised Now in the World', in *Money and Banking in Islam*, Z. Ahmad et al (ed.), Islamabad, 1983, pp. 271-72.

³ Ghaffar, M. A., 'Interest Free Banking: Problems and Prospects', *Journal of the Institute of Bankers in Pakistan*, Karachi, March 1986, p. 33.

⁴ Darwish, A., 'Egypt Swoops on Islamic Banking', *The Independent Newspaper*, London, 11 November 1988, p. 13.

What the management of the Islamic Banks have to do now is decide how to harmonise the accounting policies as well as the reporting that all Islamic banks should follow so that not only the public at large will understand what they are doing but also, and more importantly the regulators, depositors and shareholders. It is not going to be an easy task. The European Community took years to come up with a directive for the banking community to follow and comply with⁵. It is only now that all the European banks are following this standardised system of reporting. Now the Islamic banks need to think about operating under a standardised system.

The question can be raised here of the need for harmonisation of financial reporting in Islamic banks. No doubt, the management of Islamic banks have a much greater responsibility because of the depositors. Those depositors have up to now, even if they were not depositing their funds with an Islamic bank, held onto them because they felt that the system around them was not really complying with their own beliefs, or faith. They are now very keen about putting their funds in Islamic banks. More and more it will be found that depositors are becoming increasingly sophisticated and will need to know what is happening with their funds. They will request banks to give more information about the projects in which their funds are used. Islamic banks will be required to give more information when they advertise new projects, and wish to receive funds.

Therefore, auditors of Islamic banks may soon also be requested to issue special reports to the depositors confirming that the profit distribution was prepared in accordance with the contractual terms and that the profit of a specific project is fairly stated. At the moment one of the methods of distribution is that the board of directors of the Islamic banks decides the percentage to be paid to the various types of depositors. As depositors become more sophisticated they will want to know if the distribution by the board is correct and if there are any problems with the management of the bank.

⁵ Badawi, S., 'Accounting Policies & Procedures', in *Islamic Banking & Finance*, Butterworths Editorial Staff, Butterworths, London, 1986, p. 98.

6.2. Long Term Financing and Follow up of Projects

Naturally, as investments under some economic environments are expected to suffer to a more or less equal extent from the risks that affect the major investments in that environment, Islamic banks are directly and more severely hit by such risks which emanate from a change of economic policies by the government. This is not only because the nature of their finances leads them to direct involvement in the concerned projects, but also because of the nature of their finance.

The Islamic bank usually takes the necessary steps to ensure that all factors essential for the successful implementation of the project are reasonably secured. However quite frequently, in countries with inherent economic difficulties, complications crop up which increase the bank's involvement in the project technically, administratively, and financially. Such involvement sometimes compels a change in the mode of finance together with complex legal problems⁶.

It is practically impossible to start executing all elements of the project at the same time. Here a certain degree of importance of coordination is very relevant. For example the devaluation of the Sudanese pound made it almost impossible for some projects, which were financed on a *musharakah* basis, to pay off the instalments due to foreign suppliers of the machinery. This delayed and reduced the level of income due to the bank and prolonged the period of repayment of the cost of the machines. The case might have been quite different with a traditional bank. It might have delayed payment, but not necessarily given a low rate of return.

Unlike traditional banks, the anxieties of Islamic banks start after they give out funds for investments. The Islamic bank has to follow up the projects to which finance is provided to see that it has been spent in the proper way and that the project is well managed. This introduces the need for a very strong follow-up department. Its members should be well qualified to serve and deal with and advise different types of people and businesses. The follow-up does not only ensure efficient

⁶ Mudawi, A. Y., 'The Placing of Medium and Long Term Finance by Islamic Financial Institutions', in *Islamic Banking & Finance*, Butterworths Editorial Staff, Butterworths, London, 1986, pp. 128-136.

utilization of finance and guarantees a sizeable return on the investment, but also looks after the efficient performance of the concerned business. The Faisal Islamic Bank of Sudan has unique experience in this area. At the start of its operations, the bank used to provide working capital to certain industries in the form of cash without having supervision over the performance of the relevant factory. The rate of return was quite low. It was about 5 to 6%. The bank instituted the practice of follow-up and started sending out their staff to supervise the projects, to consult with the factory management on problems of purchasing the raw materials at the right time, providing proper storage for both raw material and the finished product, as well as discussing problems of marketing the products. The result was quite rewarding. The return has risen to between 15 and 18%, whereas the expenditure on supervision was only 1.5%⁷.

Now since the initial viability has been established Islamic banking has really come of age. Its need is to come out of the safe pastures of "soft investment" and in socially desirable long-term projects.

The financing of long term projects by Islamic banks has certain pre-requisites not required by interest-based banks. The Islamic banks will have to identify projects, carry out technical feasibility studies, estimate expected streams of profits and only then they shall be able to invest in a project. Moreover, they will have to develop a long term investment strategy. The interest-based banks usually are not concerned with macro-economic effects of their financing operations. The Islamic banks are expected to show more social responsibility in this regard by ensuring socially productive use of their resources.

6.3. Profitable Placement of Surplus Liquid Funds

A problem which some of the Islamic banks are facing, particularly those in the Gulf area, is the profitable disposal of surplus liquid funds. This problem results from the fact that the construction boom, in which some of the Islamic banks participated through *murabaha* operations and realized "quick" profits, is over, and

⁷ Mudawi, A. Y., 'Islamic Banks Problems and Prospects', *Faisal Islamic Bank of Sudan Publication*, English Series, Khartoum, 1984 , pp. 7-8.

there are no more avenues for productive investment in the economy. The absence of any secondary markets for investment makes it difficult for the Islamic banks to take up any sizeable exposure in investments in the medium to long-term because the resource base of these banks is primarily short-term. The growth in the resources of Islamic banks and the reduction in the demand for credit due to recession in the Gulf region have been identified as the main reasons for excess liquidity problems in the Islamic banks⁸.

One aspect which has to be kept in mind in discussing this problem is that most of the Islamic banks with surplus funds are located in the Gulf countries. These institutions would like to invest their funds in their own currencies, such as Kuwaiti or Bahraini dinars or UAE dirhams ect. Most of the other Muslim countries where Islamic banks exist would like to have their financing designated in other major currencies, mainly in U.S. dollars or the Islamic dinars (SDR). Furthermore, deposits in U.S dollars or Islamic dinars mean an exchange conversion. Most of these countries like Sudan for example have exchange controls. Efforts would have to be made to either arrange denomination of investments in the currencies of the Islamic banks or to persuade the Islamic banks to denominate their transactions in U.S. dollars or Islamic dinars (SDR)⁹.

The major problem facing Islamic banks concerning the above subject is the absence of a call money market (or a similiar arrangement) to deal with overnight loans, day loans, and loans of very short maturity. In such cases, it is not possible to have any profit sharing arrangement because of the difficulty of determining profit for such short periods. Definitely there will be conflict of interest between the borrower who would be happy to borrow an interest-free amount with a small service charge, and the lender, particularly the institutional lender, who would be reluctant to lend money, even for a very short period of maturity, to a borrower who he knows will profit from this loan even though it is difficult to determine the extent

⁸ Ahmed, A., *Development and Problems of Islamic Banks*, Islamic Research and Training Institute, Islamic Development Bank, 1987, Jeddah, p. 65.

⁹ Islamic Development Bank, *Problem of Investment of Liquid Funds of the Islamic Banks*, Working Paper for Consultative Meeting of Eminent Bankers, Jeddah, Saudi Arabia, February 1984, p. 9.

of the profit¹⁰. No doubt, there is a short term surplus. We are of the opinion that the implementation of this type of arrangement would encounter some difficulties as Islamic banks are few and scattered. Furthermore, there is the currency risk factor. While institutions can usually cope with currency risk for the longer term, the costs and currency risk for short-term movement of funds may be a restraining factor.

Therefore the major challenge has not been the short age of funds, but rather the difficulty in identifying sound financing opportunities. The supply side is less critical than demand, as there has been a notable lack of demand for virtually all of the facilities which the Islamic Development Bank has to offer¹¹.

To overcome this problem the Islamic Development Bank (IDB) in 1980 introduced an Investment Deposit Scheme whose main purpose was to raise the resources of the Bank and to offer an investment scheme to attract prospective investors and provide them with reasonable returns. The proceeds of the investment deposit scheme are invested in foreign trade financing which is short term by its very nature.

Two schemes were drawn up in 1987 to augment the funds of the IDB, the Islamic Bank's Portfolio and IDB Unit Trust. The first was immediately implemented, with a considerable degree of success, while the second is undergoing further refinement, as the details are crucial for the scheme's successful launch. Under the Islamic Bank's Portfolio scheme the leading Islamic commercial banks were invited to subscribe to a fund which was to be administered by the IDB. It was designed to be used for export and import finance of trade amongst Islamic countries, and between Islamic countries and the rest of the world.

¹⁰ Chapra, M. U., 'Money and Banking in an Islamic Economy', in *Monetary and Fiscal Economics of Islam*, Ariff, M. (ed.), International Centre for Research in Islamic Economics, Jeddah, 1982, pp. 158-159.

¹¹ Wilson, R., *Islamic Development Assistance*, Paper presented at the Project Planning Centre, University of Bradford, October 1988, pp. 20-21.

6.4. Moral Hazard and the Risk of Fraud

The risk of fraud, which is especially worrisome to the regulators, seems to have two sources. One is the possibility of underreporting of profits earned by the firm via the maintenance of two sets of books which is in turn motivated by tax-avoidance. The other source of risk of fraud is the perception that since in risk-return sharing arrangements the banks will have to carry the burden of potential financial losses there is an element of moral hazard involved in these transactions¹².

However, in the traditional banking system the bank need not have an interest in the income of the borrower beyond that necessary for the self-amortization of the loan. But in the Islamic banking system the determination of the exact amount of profit earned by the *mudarib* would be necessary to calculate the banks share. The Islamic bank would therefore face a dual risk: (a) the moral risk which arises from the *mudarib* declaring a loss, or a profit lower than the actual, because of lack of honesty and (b) the business risk which arises from the behaviour of market forces being different from that expected. The question arises here as to the extent possible for the Islamic banks to incur losses, and would these losses lead to a wholesale withdrawal of funds?

Undoubtedly for the successful functioning of the profit and loss sharing system a high degree of business morality and acumen is vital. Unfortunately, the state of business ethics and moral fabric of the society leaves much to be desired at present in the Muslim countries. It therefore seems impractical to expect a smooth and successful transition to an interest free system in the immediate future. The interest bearing system is dominating the banking environment because of the moral hazards or dishonesty on the part of the borrowers. People are more concerned with their material rather than moral values and religion does not seem very important.

One factor which may increase the degree of risk, according to an official of the Faisal Islamic Bank of Sudan, is the lack of statistical data, such as profit distribution ratios among the parties involved in various trade, industrial, or service

¹² Mirakhor, A., 'Analysis of Short-Term Asset Concentration in Islamic Banking', *IMF Working Paper*, Washington, October 1987, p. 10.

investment ventures. The contractual agreements do include a ratio for the distribution of profit. However, as the parties lack experience in such investment schemes, one or the other may feel either deprived of a due share or taken advantage of, often after additional facts come to light. Consequently one of the parties may then resort to inequitable, illegal or immoral practices in order to retaliate¹³.

However, there are at least three possible ways in which this residual risk can be minimized. First is by implementing the Islamic law of contracts which requires that stipulations of agreements entered into must be faithfully observed, and which proposes well-defined retributive judicial measures to safeguard the terms of the contract. Second is the possibility of third-party insurance schemes with cost participation by the central bank and commercial banks. Third is maintenance of loss-compensating reserves by the banks. It must also be noted that hardly any bank can be expected to finance a risk return sharing project without sufficient information regarding the managerial ability, competence and character of the entrepreneur.

6.5. Central Bank Regulation

Problems arise from the banking procedures applied by the central bank to all banks including Islamic banks with regard to monetary reserves and liquidity requirements. Although Islamic banks do not object to the principle of the central banks's control, they believe that because their operations are of a different nature, they should be exempted from liquidity control procedures¹⁴. The argument is that these procedures are meant to protect depositors by preventing banks from over-using depositors' funds to the level of exposing depositors to the risk of not being able to withdraw their deposits because of the bank's poor liquidity. In Islamic banks, while this might apply to current deposits, it does not apply to investment deposit accounts. Investment deposits are kept for a specific period, from a few months to a few years, before which the depositor cannot withdraw his fund, either

¹³ Abdeen, A. M. and Shook, D. N., *The Saudi Financial System in the Context of Western and Islamic Finance*, John Wiley & Sons, New York, 1984, p. 192.

¹⁴ El-Ashker, A. A. F., *The Islamic Business Enterprise*, Croom Helm, Beckenham, Kent, 1987, p. 220.

partly or fully. Through scheduling these payments, the Islamic bank can plan its cash budget in a more reliable manner than the traditional bank.

Furthermore, if we take into account the fact that the depositors (with respect to investment accounts) do not necessarily terminate their accounts at the end of the period, and many renew their accounts, we can conclude that the probability of fund withdrawal is even lower.

Moreover, Islamic banks do not accept interest, and hence they are in a disadvantageous position vis-a-vis commercial banks which earn interest from these deposits. It is true that central banks in some Muslim countries do not pay interest on the compulsory reserves, but the reserve itself represents a restraint on Islamic banks and results in the decrease in funds which could have otherwise been used in viable ventures¹⁵.

It becomes necessary therefore, to institute a dialogue with officials in the central banks to convince them to design a separate and different set of rules and regulations for supervising Islamic banks. To do this, Islamic banks have to be quite well-versed in the operations of central banks in order to understand the targets which could be specified by the directives and rules issued from time to time by the central bank.

Another important government organ which needs close attention from the Islamic bank is the taxation department. The department has, for instance, to understand the similarities between the interest charged by traditional banks to their customers and the profits taken by Islamic banks from their partners. While the former is considered as a deductible cost by the taxation authorities, the latter is not. This practice if not corrected through the convincing approaches of Islamic banks could work to discriminate against the clients of the Islamic bank.

Tax advisors have to look at questions on both the legal level and factual level to decide what pattern will work in each specific case¹⁶. They have to look at

¹⁵ Karatash, S. J. and El-Hennawi, M. S., *Islamic Banks: A Challenge for Cooperation*, Islamic Development Bank, Internal Paper, Jeddah, February 1984, p. 9.

¹⁶ Carlson, T., 'Legal Issues & Negotiations', in *Islamic Banking & Finance*, Butterworths Editorial Staff, London, 1986, pp. 73-74.

the internal laws, not only of the country in which the borrower or the lender are incorporated, but the country in which the transaction takes place. Where does the transaction take place? Is it where the goods are located? Is it where the goods are coming from? Where the goods are going to? The tax authorities have to consider the internal tax laws of every country the transaction touches.

Another disadvantage which the client of an Islamic bank is exposed to, is that his actual taxable profits could easily be ascertained from the books of the Islamic banks. For equitable treatment the taxation authorities need to be convinced that since the practice of traditional banks could not in any way enable them access to the actual profits of the bank's customers they should treat the clients of Islamic banks on an equal footing and should not take advantage of any information they might get from the books of the Islamic bank.

Since an Islamic bank gives special priority to the social well being of the people, it has to develop a research programme in various areas to identify projects which will help the bank to achieve its goals. One example, is to identify projects which serve those who have the skills but do not have the money to finance the projects and hence make use of their skills. The Islamic bank by so doing would demonstrate one of the most important principles of Islamic economics; i.e. reward arises only when there is a combination of labour and capital. In Islam capital should have no return unless it is combined with labour. It is the effort of humans and not money that should deserve reward.

Research in such areas should look for projects which may be small and could be executed with simple means and small amounts of finance. The Faisal Islamic Bank of Sudan has a unique experience in this regard. The Bank has set up a special branch to serve artisans and small investors. This branch provides machine tools and raw materials on easy terms for artisans to enable them to utilize their skills. It finances genuine small businessmen who have the know-how but cannot obtain finance.

6.6. Planning Problems

Planning for future policies is a problem for institutions in developing countries, particularly when government policies cannot be predicted with any degree of certainty. This problem is not particular to Islamic banks, but is shared by other traditional financial institutions and businesses. In the absence of good knowledge about the intentions and policies of the government, it will be very difficult if not impossible to set annual or bi-annual targets and subsequently it will be difficult to prepare programmes that may fulfil those targets with any degree of precision.

Successful planning is largely a result of an accumulation of statistics and information drawn from past experience and matched by adequate knowledge of the present environment with the intention of setting certain parameters to indicate the future course. In view of their short history Islamic banks are at a disadvantage when compared with traditional banks regarding the wealth of accumulated past experience. All the Islamic banks can do is to benefit from the experience of traditional financial institutions both locally and internationally. They are born in an environment where the laws, institutions, training and attitudes are set to serve an economy based on the principles of interest. As such Islamic banks are caught in a situation where all odds are against them.

An Islamic bank does not only set financial targets to meet within a certain time-frame but it is essential that these financial targets be matched with the appropriate projects which meet its investment criteria. The lack of appropriate projects from the financial, economic, social and Islamic points of view may hamper the execution of the bank's programme.

Traditional banks on the other hand, can set financial targets which they may easily achieve, since they may not worry very much about the follow-up of the projects. The built in system of liens make their worries about disbursing their finance as well as recovering it less intense than it is with Islamic banks.

The policies which are implemented by monetary authorities have a more direct bearing on the activities and planning of Islamic financial institutions. For instance

once there is a credit squeeze this may automatically lead to a halt of their financial activities. It could catch an Islamic bank in the middle of a project in which it is participating. In Sudan for example, efforts are made to explain to the monetary authorities the differences between the impact created by Islamic banks finance as opposed to that of traditional banks. Financing by Islamic banks is less prone to create the same inflationary pressures as compared to financing through traditional banks.

Planning of future policies of an Islamic bank can prove to be more capable of supporting initiatives intended to restore balance of payments equilibrium. An Islamic bank, as a partner in an export or import operation can have the means and the knowledge to provide or withhold finance from operations according to their compatibility with the national policies and objectives. The Faisal Islamic Bank of Sudan has helped the economy in many other ways, most remarkably in assisting exports. Before Islamic banking the export sector was beset with problems and very unprofitable¹⁷. The Bank entered this field and participated with entrepreneurs with full responsibility in case of loss. This encouraged many who would have otherwise found the conditions of *riba* banks too severe in view of the high risk and the need for guarantees. Within a few years the Bank has been financing more than half of the country's exports. Islamic banks in Sudan have created new exports and new markets, especially for sorghum and oil seeds. Fifty percent of the foreign exchange the banks earn are turned over to the central bank. As a result, the foreign exchange profile of the country has greatly improved.

To sum up this section, the Islamic banks found themselves placed and co-existing in a situation dominated by a non-Islamic financial system as well as a secular social and political establishment. They found themselves facing a formidable lack of information and experience necessary to help their research. Yet this was badly needed for their introduction to a barely receptive environment because of its deep seated non-Islamic economic laws and practices. Naturally they were greatly

¹⁷ Mudawi, A. Y., 'Revealing the Truth Behind FIBS'? *Arabia*, The Islamic World Review, London, February 1985.

influenced by the economic situation in their respective countries. The scarcity of relevant studies and publications posed difficulties in their way to reach the ideal organizational set up and beset their planning efforts. Added to that was the deficiency in trained staff so essential for the success of any venture.

6.7. Equity Financing

Generally, it is well recognized that equity financing is a highly complex and difficult operation. This is borne out by the fact that other commercial banks or international development banks have generally fought shy of getting involved in this operation. Considering the element of risk, difficult nature of the investment, the long gestation period in receiving a return and problems of involvement in management, some of the international development banks for example have been specifically prohibited from undertaking equity financing. Alternatively, in view of its complexity, equity financing has been assigned to a special subsidiary like the International Finance Corporation (IFC). It is well known that the IFC has not been able to make adequate headway in this field and by far the bulk of its operations are in the field of loans. There is another significant feature. The IFC, whenever subscribing to equity, also makes available a loan to the enterprise. As a matter of fact the IFC is able to safeguard its interest in the borrowing enterprises like a lender. It does not do so by influencing the management through the board, where generally its policy is not represented.

As far as the Islamic Development Bank (as an example) is concerned, the situation provides a sharp contrast. The Articles of Agreement clearly rule out loans to an enterprise in whose equity the bank has participated except in special cases. In other words, the bank cannot use the leverage which the IFC has as a lender. There are several other factors taken into account. For example, the opportunities for equity financing are not as abundant in most Muslim countries with the exception of a few. This is for two reasons: First, some Muslim countries are in the initial stages of development. Sudan is a good example where exclusive concentration is on infrastructure development rather than commercial activity allowing for equity financing. Secondly, in the case of some other countries, largely as a reaction to their

colonial past, there is a deep rooted suspicion of foreign capital and shareholders. In certain countries there are legal prohibitions against foreign shareholders whereas in others it is discouraged by conscious government policies. The reluctance to issue equity already leads to a marked shortage of securities. Thus in the case of Malaysia, for example, where the Kuala Lumpur market has a relatively large capitalisation, the annual turnover of shares is very low. This is a consequence of the close family control over share holdings exercised by the Chinese business community¹⁸.

Needless to say, closed ownership of shares results not only in a restricted supply of new securities but also in high gearing on the part of business enterprises. One consequence of this pattern of financing is both a high volatility in share prices and fluctuations in profits over time. While high gearing can generate high returns to equity it also leads to a high degree of variation in those returns. These characteristics of capital markets produce a highly speculative and uncertain trading atmosphere, both for foreign and local share holders. Again, in the case of most of the Muslim countries, the capital markets are underdeveloped or non-existent, and there is also the difficulty already identified of liquidifying or selling an equity stake.

The Islamic Development Bank's (IDB) experience of equity investment has not been satisfactory, due to a number of reasons, which can be identified as follows¹⁹:

- (a) difficulties in the setting up of industrial enterprises in member countries of the bank;
- (b) inadequacy of the necessary machinery in these countries to cope with the problems related to the completion of industrial projects and implementation delays;
- (c) escalation in relation to the originally envisaged cost;
- (d) lack of essential infrastructure necessary for the successful realisation of industrial projects; and

¹⁸ Snowden, P. N., 'International Equity Investment in Less Developed Countries Stockmarkets: The Replacement for Bank Lending?', *National Westminster Bank, Quarterly Review*, London, February 1987, p. 35.

¹⁹ Islamic Development Bank, eighth annual report, 1982-1983, Jeddah, Saudi Arabia, p. 51.

Other general problems such as the lack of professional, technical and managerial expertise have also resulted in the unsatisfactory performance of various companies in member countries of the Bank.

In addition, there has been in recent years, a substantial depreciation in the currencies of various member countries of the IDB, vis-a-vis the Islamic dinar in which foreign exchange loans extended by the bank were normally designated. Charles Harvey argues that even equity finance is not perfectly suited to the fluctuating foreign exchange earnings of poor countries, since it is possible for foreign-owned company earnings to vary in the opposite direction; however, a great deal of foreign investment in these countries is in export industries, especially mineral extraction, so that variations are at least quite likely to be in the same direction²⁰. Moreover, the enterprises in which the IDB has been involved, have usually faced the problems of under-utilisation of capacity. Within these enterprises and the national development finance institutions, it has also become apparent that their capability for arranging timely funding, for cash flow purposes, is limited.

Due to these difficulties it is worth emphasising that actual disbursements of equity finance have often lagged considerably after approval is given, partly due to slow project implementation, but also because of lax accounting standards on the part of the businesses being supported and delays over auditing. Less than 60 per cent of the equity financing approved by the IDB during its first decade of operations was actually disbursed. Furthermore the equity investment tends to be illiquid. Wilson has recently pointed out in his paper that IDB itself recognises the need for disinvestment and rolling over of equity, as well as the development of criteria for the follow-up and post-evaluation of equity projects. In reality though the IDB has a substantial equity portfolio on its books, it has no idea how many of the projects are fairing, and in most cases it has never been paid a dividend on its investment. Given this experience it is not surprising that the IDB is becoming increasingly reluctant to become involved in new equity ventures, as it may ultimately have much of its

²⁰ Harvey, C., *On Reducing the Risk in Foreign Finance for Both Parties*, Institute of Development Studies, Discussion Paper, DP 167, November 1981, University of Sussex, p. 2.

capital tied up in doubtful projects which are basically not performing²¹.

For the above reasons, the general tendency among the Islamic banks at the beginning of their experiences has been found to be investing in the projects with quick returns. This is perhaps because the banks have to pay a sizable profit every year on their deposit and they cannot afford to have no profit for some time if they are competing with the interest-based banks. If this is true then this is not only reducing the efficiency of the Islamic banks in the long run vis-a-vis other banks but will also affect the growth in developing countries if there are no banks to finance such projects.

Having said that, Islamic banks do have a moral responsibility towards these countries and they should continue participating in financing equity projects. An Islamic bank being aware of the magnitude of risk to which its finance is exposed, not only studies the project with utmost care to the finest details, but also closely follows up the execution and renders all the necessary advice and expert service to its partners. Since efficient management in most developing countries is a rare commodity, Islamic bank clients found this practice quite rewarding. The developmental nature of an Islamic bank means that it has to exert persistent and continuous efforts to improve and diversify its investment in order to achieve satisfactory results for the society, the shareholders, the depositors and the partners.

Towards this objective a clear investment criteria should be laid down in regard with the minimum return acceptable to the bank and this should be reviewed from time to time. In laying down a criteria for a minimum level of profitability and dividend instead of looking in terms of internal rate of return (IRR) an Islamic bank should instead or in addition look at future anticipated profitability and yield in terms of dividends²².

It should be the policy of an Islamic bank to revolve their investment where they can do so profitably. This is also important from a resource mobilisation point of

²¹ Wilson, R., op.cit. pp. 23-24.

²² Islamic Development Bank, Placement of Liquid Funds of the Islamic Development Bank in Conformity with Shariah, Internal Paper, Jeddah, 1983, pp. 35-40.

view to some of them. Once an investment has reached a mature level and has been providing a satisfactory return in relation to the period of the bank's investment of funds they can consider selling the investment to generate funds not only to continue but to expand their investment activity.

Due attention should be given to identification and selection of suitable enterprises for equity investment. The temptation of getting involved with difficult projects should be avoided. Possibilities of participation in equity of profitable enterprises undergoing expansion should be pursued. Investment in expansion of equity capital base of "sick" companies should be looked at very carefully. Very often in these companies the future prospects may be projected in a very optimistic fashion and should be subjected to a careful scrutiny. Another factor which Islamic banks should take into account in selection of enterprises for equity investments is the presence of a technical partner in the project. They should take into account the complexity of the project and the level of expertise available within the country and the enterprise.

6.8. Problem of Delay in Payment and Insolvency

One problem which an Islamic bank faces is how to deal with cases of delay in payment. In the interest-based banks, it is easier to handle this problem as interest is accumulating and at times the rates are increased if the debt is not paid promptly. Since Islamic banks do not charge interest, delay in due payments may cause a number of problems for them. There are three main elements which are germane to the possibility of defaults viz., the nature of the party to whom finance is provided, the purpose for which finance is provided and the type of supervision exercised by the bank on the end-use of funds. These elements are essentially the same for an Islamic bank and a traditional bank, and if sufficient care is not exercised in regard to these elements, defaults would arise irrespective of whether the bank concerned follows the traditional banking practices or the principles of Islamic banking²³. One way to solve this problem is to sell the collateral against which finance is provided

²³ Ahmed, Z., 'Some Misgivings about Islamic Free Banking', *Faisal Islamic Bank of Sudan Publication*, English Series 7, Sudan, 1985, pp. 17-19.

by the Islamic bank. However, it may not solve the problem completely. The main problem is that it should be done in such a way that it should not resemble the interest payment charged by traditional commercial banks in similar circumstances. Hence, it is suggested that Islamic banks may impose some penalty on defaulters for delay in payment in accordance with the stipulations of agreement in any one of the following ways²⁴:

(i) claiming part of the profit which customers might have made during the period of default.

(ii) claiming the profit which the banks could have made if the held up funds were returned promptly.

It seems that the second course of action is more reasonable for an Islamic bank. In fact, the first course may involve a situation in which a customer might not have made a profit during the period of default.

6.9. Islamic Banks in the West

Islamic banks also face a number of problem in investing their funds internationally. In many Muslim countries where the absorptive capacity for investment of funds locally is limited either due to a small population or other factors, the Islamic banks have found avenues of investment abroad. However, they cannot take advantage of the facilities of the Eurocurrency market and Eurobond market which offer ready investment outlets for traditional banks. The problem is even more complex for Islamic financial institutions operating on an international scale. Banking regulations in western countries stipulate detailed reserve and liquid asset requirements for all licensed banks and deposit takers. The Islamic financial institutions are still in their infancy and their further growth and development is beset by a number of problems. Based on this and other factors, the Governor of Bank of England, in an address to the Arab Banker's Association at London in 1984, pointed out that without developing an adequate supportive framework, no system can be expected to inspire the required level of confidence. Such remarks should be accepted as

²⁴ Ahmed, A., op.cit. p. 67.

useful advice and need to be considered seriously by all concerned²⁵. Since liquid asset requirements can be fulfilled only by holding cash or interest bearing securities, Islamic banks face a big problem in gaining a foothold in western countries. For this reason, Islamic banks operating in the west are now functioning merely as investment companies.

To overcome this problem, we are of the opinion that Islamic banks should establish working schemes for the protection of their investment deposits. At least in theory, one feasible method would be a deposit insurance offered by an independent company. The problem will be to find such a deposit insurance company.

The other main problem that faces Islamic banks is to decide on their profits? As a matter of fact when operating in a western environment where the rate of interest is the only measure of the cost of funds, those banks adopted the ruling rate as a "bench mark" for their cost of funds-and determined their profit element accordingly. As long as this profit element is determined in advance and fixed for the duration of the period of the transaction it seems to meet basically the profit measurement criterion of the ideal *murabaha* contract of a fixed profit element known in advance. The sticking point however is the commitment on the part of the bank not to increase the profit element with the extension of the duration of the operation which might happen for a variety of reasons, i.e. its inability (by choice) not to charge an automatic levy in the nature of deferred interest. Notwithstanding this difficulty, Islamic banks find it practicable to finance local and international trade in the west. This is increasing and there is no reason to assume that it will not continue to do so in the future²⁶.

To sum up this section, in the 1990s, because this is the decade we are interested in, we shall not only witness more interdependent economic relations than in the 80's, but the concept of economic cooperation will take precedence over other economic factors. Therefore, the need for optimum utilization of scarce resources,

²⁵ Zaidi, N. A., 'Islamic Banking and Soft Landings, Letter, Banking World', *The Journal of the Institute of Bankers and the Bankers Magazine*, Pakistan, December 1984, p. 4.

²⁶ Hamdi, A. R., *Trade and Project Finance, It's Strengths & Weaknesses*, Paper presented at Into the 1990's with Islamic Banking Seminar, June 1988, London, p. 13.

be it finance, raw materials, technology or management, implies a need for greater cooperation between different systems and values. The concept of Islamic banking at the international level requires new forms of cooperation and understanding which will help it to develop.

6.10. Conclusions

Islamic banking is presently in a nascent stage of development. Practical application of non-interest bearing modes of finance have demonstrated the feasibility of interest free banking. However, great circumspection has to be exercised to nurture it on truly Islamic lines and to consolidate it so as to meet any future challenges.

The practical implementation of the concept of profit-loss-sharing to serve as the basis of Islamic banking has opened the way for economy-wide Islamisation of the banking and financial system in Muslim countries. Progress in this direction would, however, depend on the circumstances of individual countries. Islamic banks working in isolation in different countries are faced with a number of practical problems in the actual conduct of Islamic banking. In many countries where Islamic banks have been established, the legal framework is not suited for the growth of Islamic banking. Still, they have shown encouraging results. There is evidence that even in those Muslim countries where a decision to Islamise the entire banking and financial system has not yet been taken, awareness is growing for the need of taking suitable measures to provide support and assistance to the Islamic banks in order to nurture their growth and development.

Islamic banks have to work hard to build up the wealth of experience which has been developed by the traditional banks over hundreds of years. They have to develop their instruments of finance and also the nature of their funding. The short term nature of their funds with short term private depositors' money does not easily lend itself to ventures into long term finance. Despite this and the difficulties faced by Islamic banks trying to expand their medium and long term activities, one finds that the results are not as bad as expected. On the contrary these results, when compared with Islamic banks' age and experience, are far better than predicted.

It is necessary to emphasize here that the top management of Islamic banks carries a very great responsibility for managing the affairs of these institutions so that all misgivings about the successful functioning of Islamic banks are removed and the virtues of Islamic banking are fully demonstrated in practice. Great care should therefore be exercised in the selection of top banking personnel for Islamic banks.

CHAPTER SEVEN

THE CONTRIBUTION OF AGRICULTURE TO THE SUDANESE NATIONAL ECONOMY

Introduction

The purpose of this chapter is to analyse the contribution of agriculture to the Sudanese national economy. The chapter is divided into five sections. We introduce the chapter by giving some brief economic background on the Sudan. First, the role of agriculture sector being the most important sector in the economy is highlighted. Second, agriculture in Sudan is discussed with differentiation on the basis of production methods and the production relations associated with it. Third, the main crops grown in the agriculture sector are assessed. These are cotton, sugar, groundnut, dura, dukhun, sesame, wheat and gum arabic. Fourth, the economic implications of an agricultural failure is critically examined. Finally, some conclusions are drawn.

Sudan is the largest country in Africa and the Arab world, with an area of 2.5 million square kilometers. The census of April 1973 gave a total population of 14.82 million and in 1987 estimates indicated a total of 22.84 million people. Sudan is also one of the least densely populated countries in Africa¹. Before the recent catastrophic drought and the subsequent famine, the average annual population growth rate was about 2.8%. In mid-1982 the average population density was 7.9 per square kilometer, but there are substantial regional variations and half the population lives on just 15% of the land. There has been considerable rural to urban migration; the urban population increased from 8.3% to 17.6% of the total between 1956 and 1972, and probably totals over 30% today. It is estimated that over 2 million people, or almost 10% of the population, may now live in the capital city's "Three Towns" of Khartoum, Omdurman and Khartoum North. The famine and the war in the south have brought around 2 million people to the area. The

¹ *Sudan and The World Bank*, Information and Public Affairs Department, April 1985, Washington, p. 4.

other major towns of Port Sudan, Wad Medana, El Obeid, Juba, Nyala and El Fasher have also experienced an influx of drought victims².

The Sudanese economy since independence in 1956 inherited various structural characteristics which inhibited economic growth during the period of 1986/87. Certain long-term trends resulting from historical developments have constrained growth and development. These are to be distinguished from natural resources infrastructural and institutional factors³.

In the internal sector, excess aggregate demand compared with production has created inflationary pressures on the economy. This was fueled by the devastating effects of drought and the conflict in the south. In the external sector, disequilibrium in the balance of payments, which the government tried to solve through a series of devaluations suggested by the IMF and the World Bank, resulted in the mounting arrears of foreign debt and more dependence on commodity aid to finance the import bill. The aforementioned problems reflected themselves in negative GDP rates of growth.

In view of the above, it becomes of vital importance to examine very carefully Sudan's agriculture, its problems and its future prospects and to assess the possibilities of getting out of the present crisis. Undoubtedly the question is of an economic nature but depends a great deal on political decisions in that it concerns policies adopted and practiced and relates to national security.

7.1. The Role of the Agricultural Sector

The agricultural sector is the largest and most important sector in the economy of the Sudan. It is clear that the agricultural sector in general, and irrigated agriculture in particular, can play a vital role in the process of economic development in the Sudan. The contribution of the sector to export earnings and employment opportunities is all important. In addition, it is the largest sector in terms of its

² The Economist Intelligence Unit, *Sudan, Country Profile, 1988-89*, London, p. 11.

³ Shaaeldin, E., 'The Role of the Agricultural Sector in the Economy' in *The Agricultural Sector of Sudan, Policy and Systems Studies*, Zahlan, A. B. & Magar, W. Y. (eds.), The Abdul Hameed Shoman Foundation, Amman by Ithaca, London, 1986, p.9.

contribution to GDP and it makes a significant contribution to the provision of food for the population.

The contribution of the agricultural sector to GDP can be seen from Table 7.1. The table shows Sudan's GDP by economic sector for the period 1981/82 - 1986/87 at constant 1981/82 prices. During this period, the growth of real GDP of Sudan, which had recorded a remarkable turn around from a negative rate of -11.5% in 1984/85 to a positive rate of 10.2% in 1985/86, and then slowed down to 4.9% in 1986/87. The performance of the economy in both years was determined by agricultural production. The value added in the agricultural sector had improved from a negative rate of as much as -23.4% in 1984/85 to a positive rate of 26.4%, but recorded a growth of only 2.6% during 1986/87. The slower growth of agriculture as compared to the overall rate for the economy reduced its relative share from 35% in 1985/86 to 34% in 1986/87.

Table 7.1.
GROSS DOMESTIC PRODUCT AT CONSTANT 1981/82 PRICES
(CONSTANT 1981/82 PRICES)
(£S.Millions)

SECTOR	1981/2	1982/3	1983/4	1984/5	1985/6	1986/7
Agriculture	2,396	2,214	2,159	1,654	2,090	2,143
Commerce	927	958	887	805	837	912
Manufacturing and Mining	369	407	402	405	420	443
Transport and Communication	683	699	664	615	612	664
Construction	378	450	386	351	331	341
Electricity and Water Corp.	76	95	102	117	126	127
Government Services	545	546	558	628	716	745
Other Services	862	895	926	812	815	869
G.D.P at Current Price	6,236	6,264	6,084	5,387	5,937	6,244

Source: Ministry of Finance and Economic Planning Statistics 87

In contrast, the rate of increase of value added in the manufacturing and mining sector improved from 3.7% in 1985/86 to 5.5% which helped maintain its relative share in total GDP at 7%.

Commodity producing sectors as a whole i.e. agriculture, manufacturing and mining, which may be broadly identified as the tradables, thus witnessed an increase of only 3%. This was barely sufficient to meet the requirements of an increasing population. The increase in these sectors during 1985/86 had been as high as 21.9% up from a negative rate of -19.6% recorded in 1984/85. The relative contribution of these sectors to total GDP, which had gone up from 38.2% in 1984/85 to 42.3% in 1985/86, dropped to 41.4% in 1986/87.

Table 7.2. shows the main items of export during 1985-1987. It has to be noticed that export proceeds during 1987 showed a remarkable increase of £S.663.9 million from £S.833.2 million in 1986 to £S.1447.1 million in 1987. The increase in export receipts was mainly due to the adjustment of the exchange rate of the Sudanese Pound, twice, during 1987, with a view to encourage exports. On 1st April 1987, the exchange rate for dura, sesame, groundnuts, oil and cake and meals, was adjusted upward from US \$1= £S.3.25 to US\$1=£S.4.1 and later on October 3, at rate of US \$1= £S.4.5 was announced.

Table 7.2.
EXPORTS DURING 1985-1987
(£S.million)

COMMODITY	UNIT	1985		1986		1987	
		Quan.	Value	Quan.	Val.	Quan.	Val.
Cotton	Bales	529,314	374.3	936,907	366.7	738,788	455.2
Groundnuts	M.T.	13,260	23.1	1,090	2.5	7,283	10.1
Sesame	M.T.	17,546	97.8	29,051	58.9	60,587	134.8
Gum Arabic	M.T.	27,404	66.0	19,141	141.7	18,587	267.1
Dura	M.T.	-	-	30,490	13.9	534,249	248.8
Livestock(*)	Heads	580,722	159.4	244,315	71.5	71,171	42.9
Hides and Skins	M.T.	8,380	38.8	7,743	33.7	5,305	39.0
Cake and Meal	M.T.	10,235	3.5	41,521	14.2	102,176	50.5
Others	Value	-	81.8	-	130.1	-	284.7
Total		-	844.7	-	833.2	-	1,497.1

(*) Excludes exports of camels to Egypt.

Source: Bank of Sudan, Twenty Eighth Annual Report, 1987

With the exception of livestock, all other export items showed some increases. The ban on exports of livestock which was introduced in August 1986, was maintained during 1987. The proceeds from livestock in 1987, represent execution of previous contracts. On the other hand, dura proceeds increased substantially, almost seventeen fold. In 1986 the quantity of dura exports was 30490 metric tons which went up to 53249 metric tons in 1987 aided by the upward adjustment in the exchange rate.

From above, and the key variables mentioned earlier it is clear that agriculture is and will remain the backbone of the Sudanese economy. Sudanese agriculture can

be divided into the modern, traditional and the cooperative sectors⁴. In addition to its very important contribution to GDP and export earnings, agriculture plays a very important role in:

1 - The provision of raw materials for other sectors which depend on agricultural products such as food processing industries and spinning and weaving factories, apart from providing raw materials for the transport, communications and construction sectors.

2 - Provision of employment opportunities, for about 80% of the Sudanese population is engaged in agriculture, the majority of whom are self-employed farmers. This is in addition to the large number of casual workers employed during high season in the cotton growing areas, and in rainfed areas to pick wheat and sesame .

3 - Providing food for the population. Although Sudan was in the past generally self-sufficient in the staple food crop (dura), recently, the sector has suffered from severe shortages in agricultural production which have been witnessed in many parts of the country. This problem has led many countries and financial institutions working in Sudan to direct their attention to agricultural investment. A large part of cultivatable fertile land remains unutilized at present.

Furthermore, the Four Year Salvation, Recovery and Development Programme (1988/89 -1991/92) of the government seems to reflect the importance of agriculture in the Sudanese economy which directly influences the level of activities of all other sectors. The severe drought during the three year period 1982/85, aggravated by the serious shortage of foreign exchange has led to negative rates of growth, - 7.6%, - 2.5% and - 23.6% respectively, in this sector⁵.

⁴ Rehiman, A. A., 'Evaluation of the Agricultural Bank's Contribution to Different Agricultural Sub-Sectors, 1959-1977', unpublished M.Sc. dissertation, University of Khartoum, 1980, pp. 29-30.

⁵ The Four Year Salvation, Recovery and Development Programme, 1988/89-1991/92, Ministry of Finance and Economic Planning, Khartoum, 1988, p. 5.

However, better rainfall in the following two seasons and government efforts to provide necessary agricultural inputs, led to positive growth rates of 28% and 3.5% in 1985/86 and 1986/87 as shown the Table 7.3.

Table 7.3.
SECTORAL GROWTH RATES (%)
(Constant 1981/82 Prices)

Sector	1982/83	1983/84	1984/85	1985/86	1986/87
Overall GDP	-0.4	-2.9	-12.8	11.8	4.3
Agriculture	-7.6	-2.5	-23.6	28.0	3.5
Manufacturing and Mining	10.3	-1.3	0.7	9.6	4.7
Electricity and Water	26.6	7.4	14.7	7.7	0.8
Construction	19.0	-14.3	12.2	-8.0	1.0
Transport and Communications	2.3	-5.1	-7.4	-0.7	8.8
Services	2.7	-1.1	-8.2	6.8	4.5

*Source: Ministry of Finance and Economic Planning,
The Fourth Year Salvation, Recovery and Development
Programme, 1988/89 -1991/92*

It appears that the long-term perspective plan (1977/78 -1994/5) was changed by the government to the Four Year Salvation, Recovery, and Development Programme (1988/89 -1991/92) due to the urgency of the crisis resulting from economic failure.

To sum up, the implementation of the macro economic policies adopted by the government in the agricultural sector and elsewhere in the economy has failed to reverse the general trend. Exports have continued to decline while imports have increased very rapidly, the trade gap has widened, inflation has soared leading to the recent food shortages and foreign debt accumulation. Although the government has effected some changes in certain policy areas, top priority should be attached to a complete restructuring of the economy. Only then can one hope for a continued

economic recovery.

7.2. Types of Agriculture in Sudan

On the basis of production methods and the production relations associated with it, Sudanese agriculture can be classified into three groups. These are: mechanized, irrigated and traditional. Table 7.4. shows area and production as percentages for the three sectors.

Table 7.4.
AREA AND PRODUCTION
OF THE AGRICULTURAL SECTORS
in Percentage Terms: 1977

Production Sector	Area	Production
Mechanized	37.2	35.4
Irrigated	18.5	50.3
Traditional	44.3	14.3

Source: International Labour Office, 1982.

Later studies, indicate that despite lacking the government investment which the other sectors have received, the traditional sector accounted for as much as 40% of the country's export earnings at the end of 1984⁶.

7.2.1. The Mechanized Sector

Mechanization in Sudan rarely involves the use of agricultural machinery for all, or even the majority, of operations. Often the mechanization extends only to land preparation and sometimes threshing, with a consequent dependence on "traditional" techniques for other operations, leading to a high labour demand at key periods in the agricultural cycle.

The total area under this group is about 10 million feddans, 80% of which was

⁶ Elobeid Baseline Survey, *Korag Credit Component*, Report Presented to Agricultural Bank of Sudan and USAID by Technoserve, Khartoum, 1987, p. 29.

leased by the government to about 4,000 investors. This means that 20% of the crop land was under the control of about 0.02% of the population. This group is almost exclusively devoted to sorghum production in large (1000-1500 feddan) schemes which are either privately owned, or are tenancies of the Mechanized Farming Corporation. These schemes are mainly located in the Eastern and Kordofan Regions.

Rainfed cotton production in the Nuba Mountains also constitutes part of this group, in the form of tenancies under the Nuba Mountains Agricultural Production Corporation, which provides mechanized land preparation services.

7.2.2. The Irrigated Sector

The irrigated farms are either owned and managed exclusively by the government or the government has the largest share and power in the decision-making process. They occupy about 25% of the cultivated area in Sudan (i.e. about 4 million feddans) and contribute about 60% to the GDP and over 50% of Sudan's total exports by value⁷. This sector produces about 40% of the country's dura requirements (dura being the main food crop), and it employs about 25% of the agricultural labour force in the country (i.e. 40% of the labour force in the irrigated sector).

They consist of 13 schemes, the largest of which are the Gezira scheme (with a total area of 2.1 million feddans), the Rahad scheme (with a total area of 200,000 feddans) and the Khashm El-Girba scheme. The Gezira and Rahad schemes will be discussed in detail below. The Khashm El-Girba scheme occupies a total area of 390,000 feddans and is managed by the New Halfa Agricultural Corporation. The scheme was established about 17 years ago. Cotton, wheat and groundnuts are the main crops grown. The scheme accommodates about 22100 tenants, about two-thirds of them were previously nomadic or semi-nomadic people. All tenancies are of 15 feddans, divided equally between the three major crops.

⁷ Ati, H. A., *The Problems of the Agricultural Sector in Sudan: An Account of Policy Gaps*, Development Studies and Research Centre Seminar, Series No. 74. November 1986, University of Khartoum, p. 2.

Other small areas are allocated for horticultural products⁸.

(a) The Gezira Scheme:

The Gezira Scheme is situated on a flat plain about five million feddans in area, located between the White Nile and the Blue Nile, and accounts for 16% of the total cultivated area in Sudan. Two million feddans of the total available area are already irrigated and three millions feddans can be irrigated in the future. The scheme operates on a partnership basis between the tenant farmers, the Gezira Board, and the government. In the main Gezira area the size of each tenancy was until recently about 40 feddans and in the Managel Extension it is about 15, but due to the rapid increase in population the area of each tenancy in the main Gezira area has been reduced to 20 feddans.

Cotton is the main crop, but because intensification and diversification policies were undertaken many other crops and vegetables such as wheat, groundnuts and rice have been introduced. The source of finance for this scheme is the Bank of Sudan.

In this scheme the Corporation provides irrigation water, maintenance of canals and marketing services for the main crop, cotton. The Agricultural Bank of Sudan (ABS) provides tractors on credit to three farmers' unions.

Recently, it has been noticed that due to mismanagement and lack of planning and follow up in the Gezira scheme, the government authorities are faced with many problems, mainly water for irrigation, maintenance of canals and spare parts for the farmers. Furthermore, due to lack of motivation and incentive, farmers have left their farms and are looking for job opportunities in the capital. Such a development will have an adverse effect on the whole agriculture sector, especially during harvest season when the labour shortage is very severe⁹.

⁸ El-Hassan, A. M., 'The State and the Development of Capitalism in Agriculture in Sudan: The Case of the Savannah Rainland', unpublished Ph.D thesis, University of East Anglia, 1985, p. 17.

⁹ Ibrahim, A. I., 'Save the Gezira Scheme from Watering Problems', *Al-Khartoum Newspaper*, January 1989, p. 3.

(b) The Rahad Agricultural Scheme:

Located on the eastern bank of the Rahad river, this scheme covers an area of 140 kilometers by 15 to 25 kilometers, between Mafaza village to the south and Abu Haraz to the north. The total area of the scheme is about 820,000 feddans. The first stage of the project intends to transform 300,000 feddans from traditional farming to modern agriculture.

The scheme is irrigated by the largest pump station in the country supplied by electricity from the Roseries dam. The total cost of the project is £S.240 million financed from foreign sources represented by the IDA, the Kuwait Development Fund, the Saudi Development Fund and U.S Aid.

The organisation of the Rahad Scheme is based on the principle of tenancies similiar to other irrigation projects in Sudan. The production area is subdivided into 12,800 tenancies of 22 feddan each, i.e. 9.24 hectare. In addition to these there are 4,000 smaller tenancies of 5 feddan, i.e. 2.1 hectare for the production of fruits and vegetables.

Through its extension employees, the Rahad Corporation strictly supervises the tenants and their work. The individual farmer hardly has any freedom of decision with respect to problems of cultivation and cropping. Unlike the Gezira Scheme, there exists no shareholder system for cotton cropping. The yield is the property of the tenants, who in turn, are paying for land and water and all the services the Corporation provides¹⁰.

The cultivation plan is devised for only two crops. A medium staple cotton of the Acala type is grown on half of the area while the other half is cultivated with groundnuts of Ashford variety. The cropping is 100% intensive. This means that cotton is grown on half of each tenancy in alternate years.

Production within the scheme is highly mechanised. Irrigation, weeding and

¹⁰ Jansen, Heinz-Gerhard and Koch, W., 'The Rahad Scheme the Agricultural Sustem and its Problem', in *Problems of Agricultural Development in the Sudan*, Gunter Heinritz (Ed.), Selected Papers of a Seminar, Gottingen, Germany, 1982, p. 25.

part of the harvest are done manually. The groundnut harvest is largely mechanised and only some additional manual work is needed.

The Corporation grants loans to the tenant farmers to meet the expenses of watering, fertilizers, certified seeds and mechanization as well as supervising the scheme and giving information to the farmers on such matters as agricultural techniques.

7.2.3. The Traditional Sector

Traditional agriculture is defined as "production largely for consumption or subsistence, the use of capital equipment limited to a few tools, a low output per head in comparison with the modern sector, the production and consumption unit being the family, either of the external kind or structured in a village or tribal settings, and little opportunity or even disinclination to introduce innovations owing to the smallness of the farm and other reasons"¹¹.

In the Sudan the term "traditional agriculture" is used to refer to rainfed unmechanized agriculture (livestock included). These traditional rainfed areas amount to nearly 17 million feddans, representing about 63% of the total cultivated area. They are scattered in different remote places and consequently are very different in character. Those in the south have potentially highly fertile land producing coffee and tea; while others are situated in the semi-arid zone of the north-western part of the country.

It is clear from the above that land and labour are not a limiting factor since they are not scarce. Capital is the major problem and this is apparent in many places where "*harig*" cultivation is a common practice because of the inability of the farmer to purchase implements or machinery. The main crops grown in the traditional sector are sesame, groundnuts, sorghum, millet and kerkadeh. In this subsistence economy, production for the market plays a very small part. Although at the same time the households growing subsistence crops are in need of cash to meet their daily requirements e.g. for the purchase of water in the western part of

¹¹ Rehiman, A. A., op.cit. p. 14.

the Sudan, or for essential food stuffs.

In the absence of cash, most households are dependent on the *shail* system to provide inputs for domestic items and farming requirements and for credit and marketing services. The prevailance of the *shail* system intensifies money borrowing among the poor tenants. The poor tenants who are already suffering from shortages of cash and low incomes, are in need of immediate cash to pay for the high loan charges. This forces them into heavy indebttness to the rich tenants and money lenders.

In explaining this situation in Sudan, it is natural in any traditional society that borrowing from someone rather than from a financial institution is usually looked upon as "bad" practice, and people are usually "shy" in talking about their financial commitment to others. Moreover the fact that the bulk of the households in the small farm sector are indebted is another indicator of their involvement in "*shail*". In what follows we have to analyse the implications of these usury relations in the form of "*shail*". Apart from the obvious exploitative relation expressed in the form of exorbitant interest rates, *shail* has a number of implications. If the farmer fails to repay all debts due to the merchant, an arrangement can be made to postpone payment until the following season. But in return the merchant will compensate for this by charging high prices for the commodities he sells to the peasant or by further lowering the prices of the peasant's crop. So as a matter of fact the effect on the households who fail to repay debts is to pay more than the normal price charged by the merchant. Naturally, however, the price advanced by the merchant is normally far less than the prevailing price at the time of marketing the crop, thereby all the difference goes to the merchant. However, in the circumstances where the agreed upon price falls short of the actual price at marketing, the farmer is obliged to pay the difference in compensation to the merchant. Ultimately, the *shail* system can lead households into a chronic cycle of indebtedness and this is the main shortcoming of debt financing in the agricultural sector and elsewhere in the economy. In case of crop failure due to an unforeseen disaster, debt will be accumulated, and there may be even a major decline in the market price of crops.

Households in the small farms are very vulnerable to such incidents.

To sum up, it has been observed that the agricultural policies in Sudan for the last decade have mainly been financially expansionary. Agricultural development was dependent on foreign finance, and this has led to deficits in the balance of payments and dwindling national reserves. Furthermore, the government has misallocated the investment resources by favouring large scale, expensive projects at the expense of human investment. In addition the transport and construction sectors were given more weight than the productive sectors of agriculture or industry. Ultimately the outcome of such policies was a massive increase in the budgetary deficit, not accompanied by sufficient support from the national resources. Investment policies did not contribute to an expansion of the productive capacity of the country¹².

7.3. Main Crops

The main crops grown in Sudan are cotton, sugar, dura, groundnuts, dukhun, sesame, wheat and gum arabic

7.3.1. Cotton

This is the main foreign exchange earning crop and constitutes about 53% of the total value of Sudanese exports. Cotton production amounted to 865 thousand bales (1 bale= 420lb) in 1986/87. This was 21.1% higher than 772 thousand bales realized in 1985/86. The comparable figures for 1983/84 and 1984/85 were 1,182 and 1,084 thousand bales respectively. The increase in 1986/87 was in long and medium staple cotton which increased over the year from 353 to 396 thousand bales (a 13% increase) and from 402 to 456 thousand bales respectively. However production of other varieties declined slightly.

Furthermore, it was found out that the area under cotton cultivation increased by about 5% from 788 thousand feddans in 1985/86 to 825 thousand feddans in 1986/87. The increase of 852 thousand kantars in seed cotton production was brought about partly by the increase in area under production and partly by an

¹² Ati, H. A., op.cit. pp. 4-5.

increase of about 24% in the average yield per feddan¹³. This increase in yield per feddan was attributed to the following reasons:

- (1) A higher standard of land preparation.
- (2) Improved farming practices.
- (3) Efficient use of herbicides.
- (4) Better use of fertilizer and pest control measures.

With regard to the sales, it was found that the uncommitted stocks of cotton in the country at the beginning of 1987 amounted to 154 thousand bales, bringing total supply of cotton available for sale in 1987 to 1,019 thousand bales compared with 1,605 and 1,240 thousand bales in 1986 and 1985 respectively. For the disposal of the stocks, sales to local users of cotton were lower from 112 thousand bales in 1986 to 31 thousand bales in 1987, while exports were down to 665 thousand bales from 1,344 thousand bales in the preceding year. In recent years, depressed world cotton prices and unsatisfactory market policies left Sudan with substantial quantities of unsold stock, estimated to be worth over £S 600 million, which eventually had to be sold off at very low prices in late 1986. Sales of 1987/88 crop have, however, been more successful¹⁴.

Exports of long staple cotton declined from 475 to 350 thousand bales in 1987. The Sudan Cotton Company was able to dispose of 79% of the total long staple supplies (357 thousand bales) and 60% of medium staple cotton (324 thousand bales).

The government is currently facing many problems regarding the cotton crop. These arise due to a shortage of labourers during the harvesting season, even though the country as a whole has abundant supply of agricultural labourers. It is clear that there is still much to be done by the authorities in order to eliminate seasonal shortages of labour as far as the large irrigated schemes are concerned. Some measures are required to make the full use of the local landless residents and to

¹³ Bank of Sudan, twenty eighth annual report, 1987, Khartoum, p. 12.

¹⁴ The Economist Intelligence Unit, op.cit. pp. 22-23.

improve the general working conditions (housing, payment, etc.) to attract migrant labour. Perhaps *musharakah* financing through which the agricultural labourers will be partners in the project with the owner of the funds, not a wage earner, might solve some of the problems. The experience of the Sudanese Islamic Bank in financing small farmers through *musharakah* (partnership financing) might be a starting point in the right direction. This will be examined in the following chapters of this thesis.

Other (steps) to reverse this situation can be taken through improvements to the physical stock of old cotton schemes, increasing the area under irrigated and rainfed cotton cultivation, and eliminating the factors that cause bias or disincentives to growing cotton. A rehabilitation programme financed by the World Bank for the old schemes is also underway.

7.3.2. Sugar

Another import-substitution crop is sugar. Sugar consumption has been increasing significantly in Sudan. Local production began at Gunied in 1962 and Khashm El Girba in 1965. These schemes produce over 100,000 metric tons annually. Three more factories have been established recently. Factories at Sennar and Assalaya are government-owned and designed with an annual capacity of 110,000 metric tons each. Kenana is a joint venture between the Sudanese government, Kuwait and Saudi Arabia and designed with a total capacity of 300,000 metric tons. The output is expected to rise to a maximum of 305,000 metric tons by 1990/91.

Table 7.5.
**PRODUCTION AND CONSUMPTION OF SUGAR,
 BY PLANT (tons)**

Design capacity	1981/2	1982/3	1983/4	1984/5	1985/6	1986/7
Guneid	60,000	15,744	20,181	22,699	14,905	25,115
New Halfa	75,000	35,863	38,018	47,886	59,932	53,710
Sennar	100,000	22,326	40,601	57,700	68,900	37,569
Kenana	330,000	165,002	229,541	248,834	306,000	292,838
Hajar Assalaya	100,000	-	31,626	41,202	47,202	42,279
Total production	670,000	238,935	359,967	418,526	496,939	451,511
Total consumption	-	400,170	425,000	495,000	459,701	-
% of local consumption	-	60	85	93	100	98

*Source: The Economist Intelligence Unit,
 Country Profile 1988-89, p.23.*

7.3.3. Dura

Output of dura in the 1986/87 season was 3.3 million metric tons, recording a decrease of about 265 thousand metric tons over the previous seasons. The decrease was due to the reduction in the area under cultivation by about one million feddan.

The production of dura during 1987/88 season is expected to be lower as a result of a reduction in the area under cultivation from 11.8 million feddans in 1986/87 to 7.8 million feddans. This sharp decrease in the area under dura was due to the low prices received by famers in 1986/87. According to recent information the production of dura has been badly affected by the weather conditions, adding to the shortage of manpower. This has led to an increase in the cost of production¹⁵.

It has been estimated that area under dura cultivation during 1987/1988 could be 42% lower than that in 1986/87. This small area coupled with expected lower

¹⁵ *AL-Khartoum Newspaper*, January 1989, Khartoum, p. 3.

yields, suggest that dura production will be substantially lower than the previous season.

7.3.4. Groundnuts

Sudan used to be the second largest producer of groundnuts in Africa after Senegal, but there have been wide fluctuations in the past decade. There was a substantial increase in the area under groundnuts in the mid-1970s. Yields were not, however, particularly high and the rehabilitation scheme returned large areas to cotton in the Gezira and other irrigated farming regions.

The productivity of groundnuts has fluctuated considerably over the last decade. The volume of output has grown consistently as a result of an expansion in the area under cultivation. In 1985/86 production rose to 400,000 tons and is reported to have risen further to 600,000 tons in 1986/87. Unfortunately, however, the fall in world groundnut prices shows little sign of ending. Since 1981 the price per ton has fallen from about \$620 to an expected \$320 in the 1986/87 season¹⁶. The major constraint to groundnut cultivation is the availability of labour as harvesting is very labour-intensive. Attempts to mechanise have not been successful so far due to substantial waste losses.

7.3.5 Dukhun

Dukhun output decreased by 143 thousand metric tons in 1987 compared with the previous year. It decreased from 428 thousand metric tons to 285 thousand metric tons, about 33%. This noticeable decline was mostly due the decrease in the cultivated area.

7.3.6. Sesame

Sesame production and export volumes have also fluctuated considerably in recent years because of changes in rainfall, yields and the area under cultivation. The output has, however, increased by 133 thousand metric tons, and the main factors behind this increase include the rise of yield per feddan and better control

¹⁶ The Economist Intelligence Unit, *Sudan, Country Report*, No. 1, 1987, p. 18.

measures against pests and diseases. Between 1978/79 and 1985/86 revenues rose from £S 11 million to over £S 97 million.

7.3.7. Wheat

Wheat is considered to be a second crop rather than an alternative to cotton. Due to the climatic unsuitability for wheat the results have not been very encouraging. In contrast dura is an indigenous crop and the climate suits its cultivation.

The expansion in the area of wheat has given rise to controversy. Several studies have pointed out that the production of wheat is not justifiable in Sudan because of low yields. A World Bank mission recommended "replacing much of the wheat in the rotations at Gezira and New Halfa with cotton or groundnuts"¹⁷. Moreover, a UNDP/IBRD study found that wheat is not a competitive crop given the present levels of yield. Yet, it can be urged that:

1- Wheat is an important part of human diet in the central and norther Sudan and its domestic production affords a certain measure of security for the country as well as for individual producers.

2- Although a financial cost analysis of yields shows wheat in a poor light, an economic analysis using opportunity costs rather than financial cost of certain inputs like machinery and water would show the wheat crop to be quite competitive.

3- The alternative to local production is import from abroad which would put an additional burden on the already strained transport capacity from Port Sudan to up-country points.

However, wheat production in 1986/87 fell to 157 thousand metric tons. This was primarily due to a reduction in the area under cultivation from 360 thousand feddans in 1985/86 to 282 thousand feddans in 1986/87. In 1987/88 wheat and wheat flour were the single most important foodstuff import of the country¹⁸.

¹⁷ World Bank, *Sudan Agricultural Sector Survey*, Vol. III, Annexes 1-4, 1979

¹⁸ Bank of Sudan, op.cit. p. 16.

7.3.8. Gum Arabic

Sudan was considered the world's largest producer of gum arabic, which is collected from a variety of the acacia tree which grows naturally throughout the savanna belt of central Sudan.

During the last decade the volume of gum production has declined due to a reduction in the number of acacia senegal trees from which gum is produced, and the lack of incentives to producers. Acacia senegal grows wild in the savanna belt extending from central to western Sudan.

However, its production continued an upward trend, increasing further by 8.7 thousand tons in 1986/87 season compared with an increase of 6.4 thousand metric tons in 1985/86 season. The increase was mainly due to the upsurge in the production of both gum types (Hashab) and (Talh).

It has been estimated that the gum arabic production during 1987/88 season has risen to 34 thousand metric tons. The favourable conditions and high local purchase prices, are the main factors behind the expected increase in production.

7.4. Economic Implications of the Agricultural Failure

(a) Shortage in the supply of basic necessities, a high rate of inflation and the accompanying rising cost of living created push factors in the country at large resulting in a very serious situation. Sudan witnessed massive emigration, mainly to the oil-producing Arab countries.

Thus around 84% of the Sudanese migrants is formed by the skilled and unskilled workers. The trend is actually increasing and it is intimately associated with the general deterioration in the country's economic conditions. Thus in 1982 the total number of migrants was estimated to be around 900,000. This is a significant figure in relation to the economically active population of 7 million according to the 1973 population census. Thus the total number of Sudanese working abroad constitute about 14% of the labour force. The state actually encourages this migration in so far as it eases the internal problems.

(b) Decline in production

The Sudanese economy is fully dependent on agriculture, which contributes around 40% to GDP and 95% to the country's total exports and supports about 80% of the population. Since cotton is the major cash crop and the main source of foreign exchange for the country, a decline in its production provides an indication of the general economic crisis.

The decline in productivity may be attributed to some technical and institutional factors. Cotton is no longer the most profitable crop as far as the tenants are concerned and this has clear implications for productivity. Moreover the other major agricultural crops such as groundnuts, sesame and arabic gum have suffered stagnant production.

(c) The balance of payments crisis

Surprisingly, the crisis in the balance of payments has led to an increasing foreign capital inflow despite the inability of the country to repay its due accounts of foreign debts. The solution perceived is further flow of foreign capital. The immediate effect of which is to reinforce the hegemony of international capital. The package of policies recommended by the IMF, instead of solving the economic problems, actually aggravated the situation. M. N. Hussain has argued that "there is no evidence to suggest that devaluation made any difference to the incentive to produce more exportables. Production of all exportables declined after 1978 (devaluation year)"¹⁹.

Policies such as the removal of subsidies from basic consumer commodities, depreciation of currency, and the curtailment of state expenditure for essential services are usually accompanied by widespread mass opposition.

The growing deficit in the current account led to increasing reliance on external borrowings. The outstanding debt has been growing rapidly resulting in greater reliance on borrowing from commercial banks whose lending is characterised by

¹⁹ Hussain, M. N., 'Studies in the Theory and Practice of IMF Conditionality and Devaluation in Developing Countries', unpublished Ph.D thesis, University of Kent, 1983, p. 286.

relatively harder terms than official loans. According to the World Bank, "the debt service problems facing the country in the early eighties is largely a result of this unfavorable debt profile in the mid seventies"²⁰. The average interest rate on loans has been 7.2% and the average maturity is 9.2 years including 3.0 years grace.

7.5. Conclusions

It is clear from the above analysis that an accumulation of problems over the last two decades has significantly retarded agricultural production in Sudan and these problems were strongly connected with the strategies and development policies pursued since independence. These problems can be grouped into two major categories; the first set of problems are those affecting the forces of production (human factors-which is the main problem in LDCs in general and Africa in particular and means of production) and the second are those concerning production and how revenues are distributed.

However, if there is any attempt to rectify the critical situation, the government should start with a strategy different from the one pursued in the past. Such an attempt should start with correcting the policies and practices within the public sector, and of a paramount importance here is the reorganization of production relations in a way that would serve the actual producers. This can be achieved through a number of specific short and long term policy measures.

With regard to short-term policy, the main emphasis should be to reduce the agricultural operation costs and the cost of inputs. This can be done by updating information on agricultural machinery and ensuring spare parts availability. The rehabilitation funds, which are allocated for import of spare parts and machinery, can then be redistributed according to need of the different schemes.

Long term policy should be in line with the short term measures and the government should set priorities by ensuring an even distribution of funds between regions, sectors and subsectors according to these priorities. It should consolidate the traditional sector and promote its development through various ways and means

²⁰ World Bank, *Sudan, Investing for Economic Stabilization and Structural Change*, 1982a.

like:

(a) transferring the existing rural development schemes into agricultural or agro-industrial cooperatives aimed at developing production forces in those areas.

(b) building training centres in rural areas to create more opportunities for jobs and livelihood other than agriculture. To produce and market necessary consumer goods and to strengthen the service sector in those areas.

(c) applying new mode of financing like profit sharing schemes, *musharakah* in agriculture whereby the incentive elements will be introduced not only to the owner of the land but also to the new partner who will be the farmer to enable him to settle down in the rural area.

CHAPTER EIGHT

THE SUDANESE FINANCIAL INSTITUTIONS

Introduction

The purpose of this chapter is to examine analytically the financial institutions in Sudan. The chapter will be divided into nine sections. First, we discuss the banking system in general. Second, the government credit policy is examined and consideration given to priority sectors for financing. Third, the role of commercial banks is analysed and fourth, an explanation is given concerning the special purpose banks, which include the Sudanese Real Estate Bank and the Industrial Bank of Sudan. Fifth, we also deal with the savings institutions in Sudan. A subsection assesses the role of the Sudanese Savings Bank, the Post Office Savings Bank and Premium Savings Bonds Project. Sixth, other local financial institutions, namely the Sudanese Rural Development Bank, the National Development Bank and the Islamic banks are examined. Seventh, since our interest in this thesis is on equity financing, we examine very thoroughly the current economic activities of Islamic banks in medium and long-term financing to see how far these institutions have succeeded in achieving their development objectives. Eighth, the importance of the informal credit financing is assessed since this sector still plays an important role in the rural areas of Sudan. Finally some conclusions are drawn.

8.1. The Banking System in Sudan

The banking system in Sudan has experienced a dramatic development since the attainment of political independence in 1956. Prior to independence the Sudan banking system possessed all the earmarks of colonial banking. The commercial banks were branches of foreign institutions, there was no central bank and local currency (Egyptian banknotes and British coins circulated side by side as legal tender). Within this environment there existed a banking and credit system, consisting mainly of expatriate banks, to serve the needs of both export and import trade and also serve as deposit takers for the expatriate and indigenous firms operating within the country.

After independence the Sudan Currency Board was established in 1957 to issue the new Sudanese currency. In 1959 the Bank of Sudan Act was passed and in the following year the central bank became one of the first operational central banking institutions in independent Africa. The Bank of Sudan assumed responsibility for administration of foreign exchange and related currency matters including regulation of the issue of notes and coins, development of a sound credit and banking system, and serving as the banking and financial adviser to the government.

In May 1970, a fundamental change took place in the banking arrangements in Sudan. The government decided to nationalise the banking system and other Sudanese and foreign financial enterprises. The objectives of this act were:

(1) To develop and improve the banking facilities available to various sectors specially the traditional sector and the rural areas which desperately needed banking facilities.

(2) To give the Bank of Sudan and the government firm control over the monetary policy and to implement this policy as part of a coordinated national economic policy designed to benefit the Sudanese people¹.

(3) To use the banking system as an instrument of control over capital investment and other units of public sector.

Presently, the formal financial system in Sudan includes the Bank of Sudan (the central bank), 12 commercial banks (five national, five foreign and two joint venture) with 144 branches and offices, three Savings Institutions (the Sudanese Saving Bank, the Post Office Saving Bank and the Premium Saving Bonds Project), three specialised banks and some local financing institutions. The Agricultural Bank of Sudan (ABS), the Industrial Bank of Sudan (IBS) and The Real Estate Bank of Sudan (REBS) are specialised banks. Local financing institutions include the Sudanese Rural Development Corporation and the National Development Bank as

¹ Ali, S. A., 'Sudanese Financial Institutions and Their Functioning', in *Growth Employment and Equity*, Ali Mohamed El-Hassan, (ed.) The International Labour Office in Collaboration with the Economic and Social Research Council, Khartoum University Press, 1977, p. 6.

shown in the following Figure 8.1².

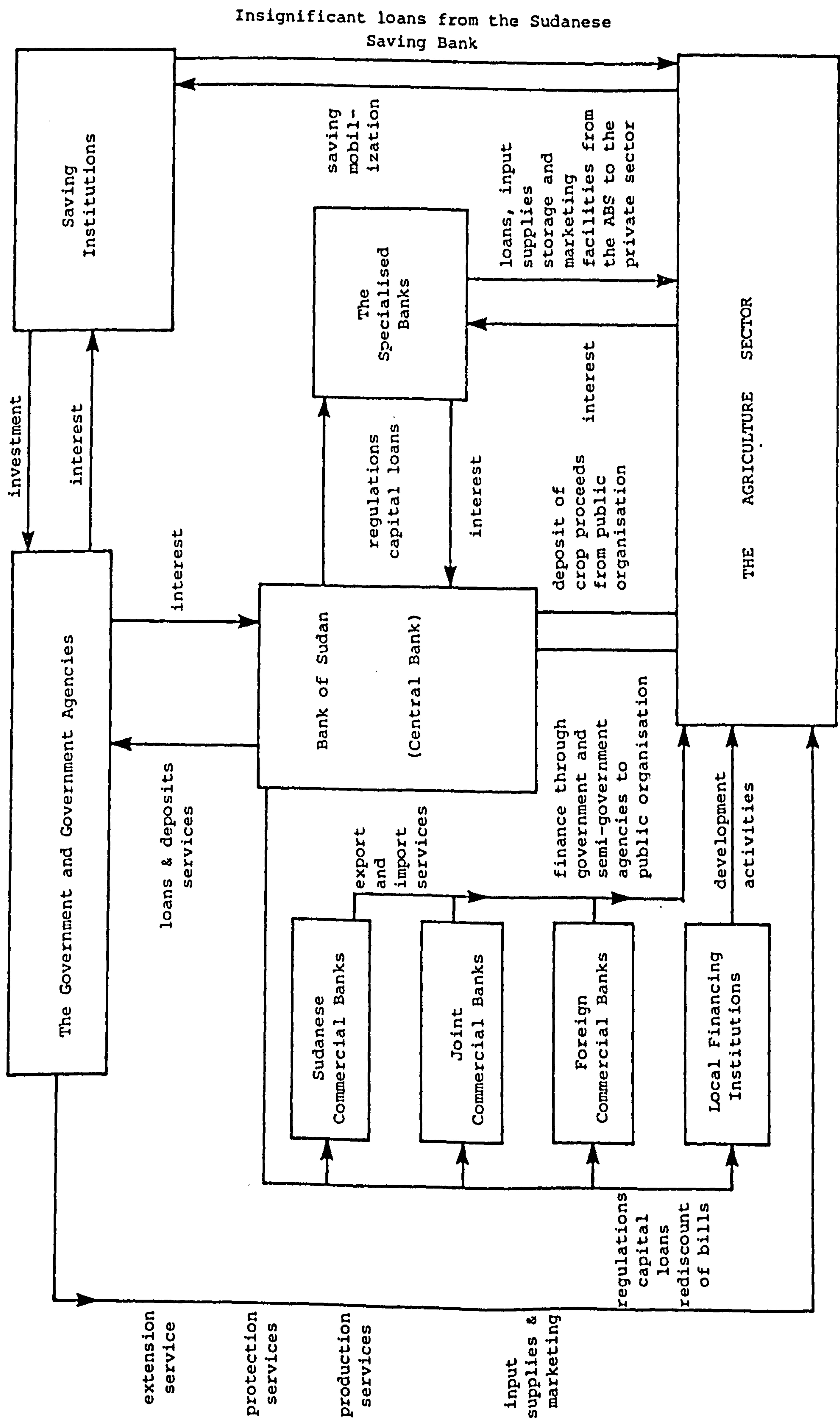
Table 8.1 shows the assets and liabilities of the Bank of Sudan for the period of 31st. December 1986 and 1987.

Table 8.1.		
ASSETS AND LIABILITIES OF THE BANK OF SUDAN		
(£S 000's)		
	31.12.1986	31.12.1987
LIABILITIES		
Notes and Coins in Circulation	2,879.332	3,855.039
Sight liabilities		
Central Government	(2,474,966)	(4,275,192)
Banks : Commercial	2,013,167	2,649,272
: Specialized	86,049	195,953
Boards	7,732	17,458
Payments Agreements	—	369,473
Others	3,669,348	5,433,983
Time liabilities	1,097,526	1,662,007
Capital and Reserves	33,813	59,005
Other Accounts	626,109	778,828
TOTAL LIABILITIES	7,938,110	10,745,826
ASSETS		
External Assets Eligible under section 32 of the Bank of Sudan Act.		
Foreign Notes, cheques and Bank Balances	116,956	26,022
Foreign Securities	37,969	37,661
Other External Assets	1,783	3,484
Payments Agreements	220,240	—
<i>Loans and Advances:</i>		
Commercial Banks	111,374	111,089
Specialized Banks	—	—
Temporary Advances	—	—
Long term loans to the Government	1,730,300	1,730,300
Advances	1,656,179	2,283,179
Participation in Banks	112,155	136,455
Other participations	10,351	10,351
Non - Transferable Treasury Bills	2,912,978	3,122,058
Other Accounts	1,028,098	3,285,227
TOTAL ASSETS	7,938,110	10,745,826

Source: Bank of Sudan, Twenty Eighth Annual Report, 1987

² Ali. A. H., 'Finance and Credit', in *The Agricultural Sector of Sudan, Policy and Systems Studies*, Zahlan, A. B. (ed.), Ithaca Press, London, 1986, p. 332.

FIGURE 8.1 The Formal Agricultural Sector Financial Systems



The economic and financial deterioration is apparent. The central government deposits with Bank of Sudan decreased by £S 1800.2 million during 1987. The government borrowing from the Bank of Sudan, on the other hand, increased by £S 209.1 million. As a result, the central government's net position with Bank of Sudan deteriorated by £S 2009.3 million during 1987 compared with a small deterioration of £S 1249.0 million in the preceding year. Furthermore, the net position of the specialized banks with the Bank of Sudan showed an increase of £S 105.6 million. This resulted from an increase in their deposits of £S 109.9 million which was offset slightly by an increase in Bank of Sudan's participation in their capital of £S 4.3 million³.

Commercial banks deposits with Bank of Sudan showed a remarkable increase of £S 636.1 million whereas their temporary borrowing decreased by £S 0.3 million and the central bank's participation in their capital increased by £S 20.0 million. Thus, the net position of commercial banks with Bank of Sudan improved by £S 616.4 million.

8.2. Credit Policy and Priority Sectors for Finance

The objective of government's monetary and credit policy in 1987 continued to be the containment of unwarranted growth of domestic liquidity with a view to relieving inflationary pressures, while ensuring availability of adequate finance for productive economic activities. As a result, commercial bank's free reserves were still restricted through an obligatory cash deposit in the Bank of Sudan, and ceilings continued to be prescribed on commercial bank's lending to their customers. Certain measures were introduced in an attempt to motivate savers. These included the following:

(A) The reserve ratio of cash deposits of commercial banks to be kept in the Bank of Sudan remained at the previously prescribed 20% level.

(B) Foreign banks were not allowed to accept deposits in local currency except for customers engaged in foreign trade, financing development projects, and for

³ Bank of Sudan, twenty eighth annual report 1987, Khartoum, p. 59.

Sudanese nationals working abroad dealing with the same bank.

(C) The prohibition of interbank lending has been maintained, nor can commercial banks hold investment deposits on behalf of each other except in case of developmental purposes approved by the Bank of Sudan.

(D) Banks are to keep all arrears due to foreign suppliers with the Bank of Sudan in a blocked account not to be drawn down except for the purpose of repayment of those arrears and after duly providing the foreign currency equivalent.

With regard to the priority sectors for financing, the government was allotted a unified share of 80% of total bank credit as against 90% in the year 1986 for exports, working capital for industry and agriculture, handicrafts and medium and long-term development projects.

For oil mill processing requirements, banks were instructed to make sure that the financing purchases of raw material should strictly be for genuine industrial purposes and not for trade. On the other hand financing of agricultural products for local trade, for example sesame, banks have to make sure that finance is provided only to either Sudan Oil Seeds Company directly or to those traders who have contracts with the Company.

With respect to credit policy in the sphere of import financing, government policy continues to have the objective of limiting the imports of non-basic commodities and the restricting of the hoarding of necessary goods. Furthermore, refinancing of local trade is not allowed, and the credit is to be liquidated within three month. Banks are directed to give great attention to requiring the customers to generally ensure a minimum of 25% finance by themselves and to have goods stored with the financing bank. A Bank decree has also prohibited financing the purchase and storage of certain essential consumers goods, speculative activities, personal loans, real estate and refinance of goods imported through own resources of foreign exchange except for essential inputs.

Due to this critical situation the authorities have decided to limit financing through overdrafts to explicitly specified purposes. Payments have to be made

against sufficient guarantees, and direct to the ultimate beneficiary.

8.3. Commercial Banks

Table 8.2 highlights the position of commercial banks at the end of December 1987 through a consolidated balance sheet.

Table 8.2.
CONSOLIDATED BALANCE SHEET OF COMMERCIAL BANKS
(£S 000's)

	31.12.1986	31.12.1987
LIABILITIES		
<i>Deposits:</i>		
Central & Regional Government	688,066	1,120,507
Public Entities	205,151	261,089
Private Sector	4,234,712	5,786,160
<i>Balance Due to Banks:</i>		
Bank of Sudan	11,644	9,663
Local Commercial Banks	18,022	11,474
Foreign Correspondents	414,822	535,935
Capital Accounts	722,879	847,332
Other Liabilities	1,019,335	1,311,356
ASSETS		
Reserves	2,694,741	3,282,758
Domestic Cash	(119,095)	(230,245)
Balance with Bank of Sudan	(2,575,646)	(3,052,513)
Due from local Commercial Banks	42,876	15,874
Foreign Correspondents	1,234,812	1,595,294
Treasury Bills & Govt. Securities	60,157	61,014
Advances to Private Sector	2,637,597	3,792,623
Other Assets	703,448	1,135,962
TOTAL ASSETS= TOTAL LIABILITIES	7,373,631	9,883,525

Source: Bank of Sudan, Twenty Eighth Annual Report, 1987

It is apparent that the total deposits held with the commercial banks increased by about 40% during 1987 compared with a slightly higher rate of growth of 42% recorded in the previous year. In absolute terms, total deposits rose by £S 2031 million at the end of December 1987 compared with £S 1514 million at the end of the previous year. But if we take inflation into consideration then the total deposits decrease.

Also the breakdown of total deposits shows that the increase of £S 2031 million in the total deposits during 1987 was mainly concentrated in current account deposits which went up sharply by £S 1454 million or 44% and constituted about 72% of the total increase in deposits held with commercial banks during 1987⁴.

8.4. Special Purpose Banks

Three special-purpose banks play an important role in the Sudan in providing loans to credit sectors where there is an absence of alternative sources of funds.

The Sudanese Real Estate Bank was established in 1966 and commenced operations in the following year. The objectives of this bank are to provide financial assistance in the housing sector by means of extending long-term loans to individuals for the purpose of constructing urban dwellings. No doubt, a housing shortage in the rapidly growing urban centres of the Sudan provided the stimulus for establishing the Real Estate Bank. The Bank is further charged with the responsibility of undertaking research designed to improve building standards and to promote the use of local materials in the construction industry. The total paid up capital of the Bank in 1973 was £S 3.6 million. With subsequent development the paid up capital of the Real Estate Bank equalled the subscribed capital of £S 15 million by the end of 1983. Since then the management of the Bank has attempted to increase the capital but has failed. The reason being the liquidity problem which has had a bad effect on advances. The advances made by the Bank during 1987 were at 54.9% and 68% of the loans provided in 1985 and 1986 respectively. Since then the problem of liquidity has led the bank management to decide terminating commercial credit to the public⁵.

The Industrial Bank of Sudan (IBS) was established in 1961 to assist and promote the establishment and modernisation of private industrial enterprises in the Sudan, and to encourage the participation of both internal and external private capital in Sudanese enterprises. On 30 May, 1973 the Industrial Bank's paid-up

⁴ Bank of Sudan, op.cit. p. 60.

⁵ The Public Institute for Economic Research, *Economic Scene for 1987/1988*, Ministry of Economy and Foreign Trade, Khartoum, July 1988, p. 158.

capital was £S 2.8 million, all of which was owned by the Bank of Sudan. The Industrial Bank can finance public sector as well as private sector enterprises in the form of equity and loan investments. The Industrial Bank is authorised to obtain additional funds over and above its paid up capital by borrowing. However, borrowing is limited to three times its own net worth. The Industrial Bank may be expected to play an important role in the Sudan's financial development.

The Industrial Bank of Sudan is the only specialised financial institution in the Sudan catering for the long-term credit requirements of the industrial sector. During periods of economic and financial austerity ceilings on commercial bank credits fixed by the central bank at the insistence of the International Monetary Fund leave the banking sector little opportunity to expand credit, even when the banks possess sufficient liquidity. The Industrial Bank is limited in that its maximum loan exposure to any single enterprise cannot exceed 20% of its net worth in the case of a public sector corporation, 15% of its net worth in the case of a partnership, and 10% of its net worth in other cases. Industrial Bank's maximum exposure in the equity of an enterprise cannot exceed 10% of its net worth. And finally, IBS can lend up to a maximum of two-thirds of the total cost of a project.

According to the Bank of Sudan report of 1987, the IBS extended loans totalling £S 25.6 million compared with a smaller amount of £S 3.6 million during 1986. Fixed assets financing amounted to 53.6% of the total and working capital 46.4% as against 63% and 37% respectively for 1986⁶, as shown in Table 8.3.

⁶ Bank of Sudan, op.cit. p. 63

Table 8.3.
DISTRIBUTION OF LOANS EXTENDED BY THE
INDUSTRIAL BANK, DURING 1987
(£S.000)

REGION	FINANCE OF WORKING CAPITAL	FINANCE OF FIXED CAPITAL	TOTAL	%
Khartoum	7,059.6	4,812.0	11,871.6	46.3
Central	4,837.2	4,361.9	9,199.1	35.0
Eastern	—	3,580.6	3,580.6	14.0
Western	—	83.0	83.0	0.3
Sothorn	—	—	—	—
Northern	—	905.0	905,0	3.5
TOTAL	11,896.8	13,742.5	25,639.3	100.0

Source: Bank of Sudan, Twenty Eight Annual Report, 1987

Significantly it was found that Khartoum received a large portion of the loans along with the Central region whereas other regions received only small sums. This is the position in most LDCs where most of the finance is deployed in the capital of the country.

8.5. Savings Institutions

8.5.1. The Sudanese Savings Bank (SSB)

The Sudanese Savings Bank was established in 1974 and began functioning in December of that year. The Bank now has a number of branches and mobile bank units in major towns of the Central Region. Its objectives are the “propagation and encouragement of the habit of saving among the local population and collection and investment of the savings mobilised for the development of economic and social aspects in the Sudan”. The specific objectives were to encourage voluntary savings, large and small, in local regions for locally oriented investment and to ex-

tend banking services to locations not served by commercial banks. The authorised capital of the Bank, £S 0.5 million at its inception, rose to £S 3 million by 1978. This capital was obtained interest free from the Bank of Sudan⁷.

The SSB runs three types of accounts but with greater flexibility than the commercial banks. Service charges are collected on current accounts. The savings account carries an 8% annual interest rate. The investment account, which requires savers to invest for a certain period of time, carries a 9% interest.

It has been noticed that the total credit facilities extended by the Bank during 1987, amounted to £S 114.0 million compared with £S 96.6 million during 1986. The greatest share of these advances amounting to 43.8%, was provided to the commercial sector. Table 8.4 gives a breakdown of the advances made by the Bank.

Table 8.4.
THE SUDANESE SAVINGS BANK CREDIT
(£S.000 's)

SECTOR	DECEMBER 1986		DECEMBER 1987	
	Amount	% of Total	Amount	% of Total
Private & Professional Loans	896	0.9	1,394	1.2
Industrial Finance	6,718	7.0	6,775	5.9
Agricultural Finance	21,250	22.0	21,053	18.5
Commercial Finance	42,593	44.1	49,946	43.8
Services	8,197	8.5	11,805	10.4
Handicrafts	1,731	1.8	2,066	1.8
Housing	1,010	1.0	1,963	1.7
Transport	1,021	1.1	10,434	9.1
Staff Loans	2,914	3.0	4,549	4.0
Others	10,280	10.6	4,050	3.6
TOTAL	96,610	100.0	114,035	100.0

Source: Bank of Sudan, Twenty Eighth Annual Report, 1987

⁷ Ali, A. H. op.cit. p. 340.

8.5.2. The Post Office Savings Bank (POSB) and Premium Savings Bonds (PSB) Project

The POSB and the PSB were initiated as convenient ways of mobilising small savings. Both are handled by post offices in areas not served by commercial banks. While no interest is paid on premium savings bonds, savings deposit carries an 8% annual interest rate. Premium bonds were first issued in 1974. The value of each bond is one Sudanese pound. Three times each month, 134 prizes valued at a total of £S 5000 are drawn and the awarding of these prizes is used to encourage people to buy these bonds. Between 1977 and 1981 the number of bonds sold was 22,892 million whereas 20,407 million were redeemed. The total nominal amount of savings deposits with the POSB increased from £S 15 million in 1977 to £S 21 million in 1981.

The money mobilised by the sale of premium bonds and through post office savings deposits is invested in development projects in accordance with the directives of the Minister of Finance and National Economy.

8.6. Other Local Financial Institutions

The Sudanese Rural Development Corporation (SRDC) and the National Development Bank (NDB) are two examples of rural development corporations set up to look after the needs of rural areas. SRDC and NDB are not directly involved in financing agricultural production but cater to the service sector and related off-farm activities. They also contribute to the capital of other institutions working in the area.

A number of Islamic banks and their branches are now in operation and provide interest free loans and work on the basis of profit-sharing. The Faisal Islamic Bank of Sudan (FIBS) is one and was incorporated in 1974 as a public company under the Companies Act (1925) with its headquarters in Khartoum. The bank endeavours to stimulate social and economic development through the provision of banking services, financial transactions, commercial operations and other investment activities while conforming with the economic principles of the Islamic *shariah* Code.

It is our view that the emergence of these new jointly owned private commercial banks and the immediate success of the first, the FIBS, is perhaps the most significant of all policies and developments in Sudanese banking which we have witnessed over the last two or three decades. It reflects the gradual emergence of a new source for financing capital formation. Until the late 1970's, despite nationalisation, there was very little change in the overall pattern of commercial bank lending. By far the largest proportion 80 to 90% of total commercial bank credit was made up of short term loans. More than 40% of all advances were extended to import-export merchants, with increasing proportion for industrial (trade) credit. Loans to agricultural and industrial producers for investment purposes were, until the late seventies, negligible, and even in the latest year for which data is available, accounted for less than 20% of total advances.

An important factor in the code of behaviour of the Bank is that interest charges are completely eliminated from its activities. This prohibits any charges or bank returns fixed in advance on money lent (or borrowed) by the Bank. The FIBS currently uses four types of contracts, mainly *musharakah*, *mudarabah*, *murabaha* and *qard al-hasanah*.

In the first three contracts, the risk element justifies the taking of profit under Islamic *shariah*; the Bank shares losses and gains. The first type of contract (*musharakah*) is by far the most popular. However, the extent of the investigation and supervision undertaken by the Bank on such loans constitutes a heavy burden on its resources.

It is clear that a very few agricultural loans have been provided by most Islamic banks in Sudan as agriculture is considered a high risk area (though it has the potential, as we will examine when we analyse the experience of Sudanese Islamic Bank in *musharakah* financing). By excluding the agricultural sector which is the heart of the Sudanese economy, the FIBS serves only special segments of the market, mainly concerned with trade activities and short-term investments.

The experience of the FIBS as Sudan's first Islamic bank, in spite of its com-

mercial success in the last decade, has been met with criticism from the bankers working in this area, on the basis that the largest proportion of its total credit was made up of short term investment in *murabaha* and *mudarabah*. There has been little praise from academics, planners, policy-makers and others concerned with current developments in Sudan's political economy⁸. While we agree that these are important issues that need to be considered in any analysis of Islamic banking, we are of the opinion that we should not lose sight of the potentially far-reaching implications that the current commercial success and expansion of the Islamic banks could have for economic and political developments in Sudan's medium and longer term future.

Due to its success, other Islamic banks were established and the Sudanese authorities have supported the Islamic banks movement. In consequence, three other banks opened in 1983; El-Tadamon Islamic Bank, the Sudanese Islamic Bank and the Islamic Co-operative Development Bank owned by co-operative unions. In 1984, two Islamic banks started operations; the Al-Baraka Bank (Sudan), and the Islamic Bank for Western Sudan. On the other hand, due to the economic and financial environment which is not encouraging, various foreign and joint-venture banks carry out their normal banking activities, but they make no direct contribution to the financing of agricultural production.

The former regime in Sudan enacted Islamic laws in September 1983. As a result of this, non- Islamic commercial banks were asked to change their business activities to be consistent with the Islamic *shariah*, and in September 1984 the banking system was 'Islamised'. It has been noticed recently that a number of Islamic companies like the Islamic Investment Company and the Islamic Development Company were licenced under the Companies Act (1925) to work in Sudan with Sudanese and other Arab subscribed capital. But the experiences of these companies in agricultural production is not encouraging, and they are not expected to contribute significantly to actual investment in this vital sector.

⁸ Shaaeldin, E. and Brown, R., 'Towards an Understanding of Islamic Banking in Sudan: The Case of the Faisal Islamic Bank', in *Sudan State, Capital and Transformation*, T. Barnett and A. Abdelkarim (eds.), Croom Helm, London, 1988, p. 135.

8.7. Evaluation of Current Economic Activities of Islamic Banks in Medium and Long-term Financing

There is no doubt that one of the main development objectives which Islamic banks (IBs) have adopted in Sudan since their inception, is to support large segments of the society through their financing of medium and long term projects in order to alleviate the problem of development faced by the country. The small farmers, businesses and handicraft workers, who in the past had no chance to receive any credit from the conventional banks because they were not deemed creditworthy, have realised that their hopes might be achieved through Islamic financial institutions.

If we analyse the IB's priorities from the perspective which the policy makers have put forward to achieve the development objectives, we will realise that during the last decade or so very little has been accomplished to help the poor in Sudan.

In spite of the Islamic banks success during the last ten years, in terms of financial achievement these were mainly concentrated in short-term financing, which was more or less similar to the commercial conventional banks. The ratio of short-term financing by all IBs in Sudan up to the end of 1986 was approximately 82% of the total loan and credit extended by these banks. This ratio was even higher for some of the banks, and reached 96%. Table 8.5 gives a breakdown for the various Islamic banks.

The financing of medium and long-term investment extended by these banks was less than 18% of the total financing extended by the end of 1986. A large share was extended to companies and other financial institutions or subsidiaries of these companies through equity participation.

If we examined Table 8.6 thoroughly, we will realise that the development activities which medium and long term investment involve are indeed very limited. In the case of Faisal Islamic Bank, the contribution towards financing development activities like in the handicraft sector is not more than 2% of the total financing. The total amount extended by the Bank to small business and small handicraft was £S 18 million during the period of 1980-1986. Such financing, however, can be

Table 8.5.
CREDIT FACILITIES IN ISLAMIC BANKS IN 1986
(£S.Million)

Bank	Short term	%	Medium & Long term	%	total
Sudanese Islamic Bank	49,74	89	5,94	11	55,68
Al-Baraka Bank (Sudan)	44,44	88	5,92	12	50,36
Islamic Bank for Western Sudan	16,56	96	0,63	4	17,19
Faisal Islamic Bank	99,41	78	27,94	22	127,35
Tadamon Islamic Bank	12,64	53	11,34	47	23,98
Islamic Cooperative Deve. Bank	36,11	91	3,42	9	39,53
TOTAL	258,90	82	55,19	18	314,09

*Source: Abdul Kadar, M. "Strategy of Sudanese Islamic
Bank in medium and long-term financing",
Al-Sayasa Newspaper, Khartoum, February 1989.*

considered as commercially oriented rather than for development.

To sum up this section, the development effects of Islamic bank financing in Sudan were limited though the commercial success was very obvious during the last decade. In other words, the initial period during which IBs aimed at setting up a proper foundation has been accomplished, and it is time that IBs entered the field of medium and long-term development financing. Some of IBs have argued that they are avoiding such investment due to an unhealthy environment prevailing in the country and the risk involved is very high.

One might argue that the IBs objectives are real. Islamic banks have a responsibility towards their depositors as well. If they do not get adequate returns, then they will withdraw their funds. The difficulty is to get adequate long term returns in real terms when inflation is high, as in Sudan. This is a problem at the macro level. At the micro level the problem is risk of default and uncertainty over project

Table 8.6.
INVESTMENT DISTRIBUTION OF MEDIUM AND LONG-TERM
FINANCING OF ISLAMIC BANKS FOR 1986
(£S.000)

Bank	A	%	B	%	C	%	total
Sudanese Islamic Bank	900	15	4,950	83	90	2	5,940
Al-Baraka Bank (Sudan)	—	—	4,379	74	1,542	26	5,921
Islamic Bank for Western Sudan	—	—	0,300	48	0,330	52	630
Faisal Islamic Bank	14,920	53	10,600	38	2,420	9	27,940
Tadamon Islamic Bank	5,343	47	6,000	53	—	—	11,343
Islamic Cooperative Deve. Bank	—	—	500	15	2,924	85	3,424
TOTAL	21,163	38	26,729	48	7,306	14	55,198

Source: Abdul Kadar, M, same as above

A: Contribution in Banks and Financial Institutions.

B: Contribution in Subsidiary Companies.

C: Others contribution.

returns.

We are of the opinion, that such an argument is baseless. Most of the IBs have gained the experience and should have learned from past mistakes. Islamic banks in Sudan have the capacity and the resources to achieve the development target with some of the risks involved. No doubt, investment in medium and long-term *musharakah* financing project requires a clear cut strategy, and setting up of units for follow up and monitoring by the concerned bank in order to achieve some success on the micro level.

8.8. Informal Credit Financing

In the past, as in the case of most LDCs, informal credit was the only source of farm credit known in Sudan and the informal rural financial markets still remain

dominant in the provision of credit and other services for agricultural activities. They have been categorised into professional money lenders, traders and shopkeepers, landlords, relatives and friends in addition to informal versions of the *shail* system.

Although formal sources of credit carry low nominal rates of interest of 7 to 12%, informal lenders who charge high interest rates continue to exist in many countries. In recent studies, the volume of credit provided by these informal markets in developing countries was found to be high; 66% in Mexico, 68% in Nigeria, 75% in the Philippines, 90% in Pakistan and 71% in the Gezira Scheme in Sudan.

In Sudan, as in many developing countries, the greatest proportion of agricultural credit is supplied through moneylenders. One such system of agricultural credit known as "*Shail*" is prevalent in the Sudan among the poor tenants who represent a large segment of the society. The poor tenants who are already suffering from shortages of cash and low incomes, are in need of immediate cash. This forces them into heavy indebtedness to the rich tenants and money lenders. A part from the obvious exploitative relation expressed in the form of exorbitant interest rates, *shail* has a number of implications which are examined elsewhere in this thesis⁹.

8.9. Conclusions

The financial institutions in general play a major role in securing scarce foreign reserves and can participate in economic development. The chapter has critically analysed the formal and informal financial and credit system in Sudan.

As to the use of credit, it was clear that its characteristic feature of "short-term" has not changed since independence in 1956. Financing of foreign trade also remains a feature of bank credit. In 1987 the government was allotted a unified share of 80% of total bank credit for exports, working capital for industry and for agriculture, handicrafts and medium and long-term development projects.

⁹ Medani, A. I., 'Risk and Uncertainty in Sudan Agriculture', *Sudan Journal of Administration and Development*, Vol.VIII, 1972, p. 39.

As a formal financial institution, the Agricultural Bank of Sudan was found to be the only organization that provides a significant amount of funds to private agricultural producers. The Bank of Sudan provides seasonal loans and working capital for the Public Agricultural Production Corporations through budgetary allocations. Commercial Banks and other rural financial institutions only serve the import and export trade with very little direct investment in agricultural production which is considered a high risk area.

There is little doubt that the Islamic banks in Sudan have been very successful in the last decade in short-term financing like *mudarabah* and *murabaha*, in spite of its new experience in this field. But the real challenge to them at the present time and in the future is the extent to which they are willing to enter the medium and long-term financing through equity participation in order to bring about economic development. The latter should be one of the main objectives of Islamic banks rather than the short term aim of profit maximization. The sacrifice of short term profit may be necessary in the interests of longer term reward. Persuading private depositors of the necessity of sacrifice for the sake of a future generation may be difficult, but on the other hand governments, which usually take only a short term view in developing countries, seem incapable of performing this task. The task of economic development will encounter many problems in Sudan because its success or failure does not necessarily depend on the management of the banks, but it quite often depends on the rules and regulations imposed by the Bank of Sudan and the economic environment prevailing. However, some success has been achieved (as we will be examining in the forthcoming chapter) by some of Islamic banks like the Sudanese Islamic bank in financing small farmers through *musharakah* participation.

CHAPTER NINE

THE AGRICULTURAL BANK OF SUDAN: ITS ROLE AND SIGNIFICANCE IN RURAL DEVELOPMENT

Introduction

The purpose of this chapter is to assess the role of the Agricultural Bank of Sudan (henceforth the ABS) and its significance in rural development. The chapter will be divided into eleven sections. First, we will discuss the bank's main objectives, including a subsection which examines the bank's activities, sources of capital, investment operations and its loans procedures. Second, the co-operative society and third farm structure within the bank's organisational framework will be identified. Fourth, methodology for the case study and its scope will be identified. Fifth, we will highlight the main characteristics of the sampled areas of Kamelen and Jaili where the ABS operates. Here a subsection is included where topics such as land, labour, farm activities, capital requirement of farms within those schemes served by the Bank and other general characteristics (e.g. marketing, transportation and securities) are discussed. Sixth, we will examine the type of farming activity within the schemes, family structure, crop production and its importance for the farmers and their cash crops. Seventh, farmers' incomes in the Sudanese context will be discussed and a subsection assesses the difference between the formal and informal lending sectors, as well as the disadvantages of informal lending within the agricultural sector. Eighth, we will examine agricultural credit. Ninth, the relation of the farmer with financial institutions will be dealt with and a subsection assesses the problems facing farmers. Tenth, credit and facilities will be highlighted and comments by the farmers will be examined. Finally, certain conclusions will be drawn and a number of suggestions for farm improvements in the rural areas made.

9.1. The Bank's Objectives

The Agricultural Bank of Sudan (ABS) was established by the government to supervise an area neglected by other financial institutions and is the only specialised agricultural lending institution. The Bank operates through 24 branches and sub-branches (called offices) which cover a limited area. The Agricultural Bank Act was passed in 1957. The Bank became active in 1959 as an independent corporation with a Board of Directors who were fully entrusted with policy making and management. The objectives were to support agriculture and other incidental, ancillary and subsidiary activities by offering assistance in cash, kind, goods or services to approved persons who are primarily engaged in agriculture or associated industries. The following points were stressed in the Act:

(a) Preference was to be given to small and medium loans to farmers and cooperatives.

(b) The Bank was to help in increasing productivity by supplying improved seeds, insecticides, fertiliser and extension services.

(c) The Bank was to assist producers in the handling, storage and marketing of crops and provide expert knowledge and information regarding marketing conditions¹.

9.1.1. The Bank's Activities

The main activity of the ABS is the granting of three types of loans, short-term or seasonal loans, medium, and long-term loans to both private farms and to cooperatives. At present the share of long-term loans is insignificant and the Bank has concentrated on short-term lending intended to meet costs incurred in production and marketing. A small number of medium-term loans have been issued for the purchase of agricultural implements, cattle and the improvement of irrigation systems and farm buildings. Some long-term loans have been granted to establish new agricultural projects and for major improvements in projects already established. The

¹ Lees, F. A. and Brooks, H. C., *The Economic and Political Development of the Sudan*, The Macmillan Press Ltd, London, 1977, p. 93.

maximum repayment period is 15 months, immediately after harvest for short-term lending, and the rate of interest charged is 8%. Five years is usual for medium-term lending, with an annual interest rate of 9%, and 10 years for long-term lending at the same annual rate of 9%.

For short-term lending the Bank accepts collateral including land, buildings, crops to be harvested or in store, implements, bonds and shares, and guarantees by the government, public institutions, autonomous agencies or cooperatives.

For medium and long-term lending the Bank requires securities of registered land or buildings, letters of credit from commercial banks, shares and bonds and guarantees from government, public corporations and unions. The value of the security has to be 30% more than the amount of the approved loan.

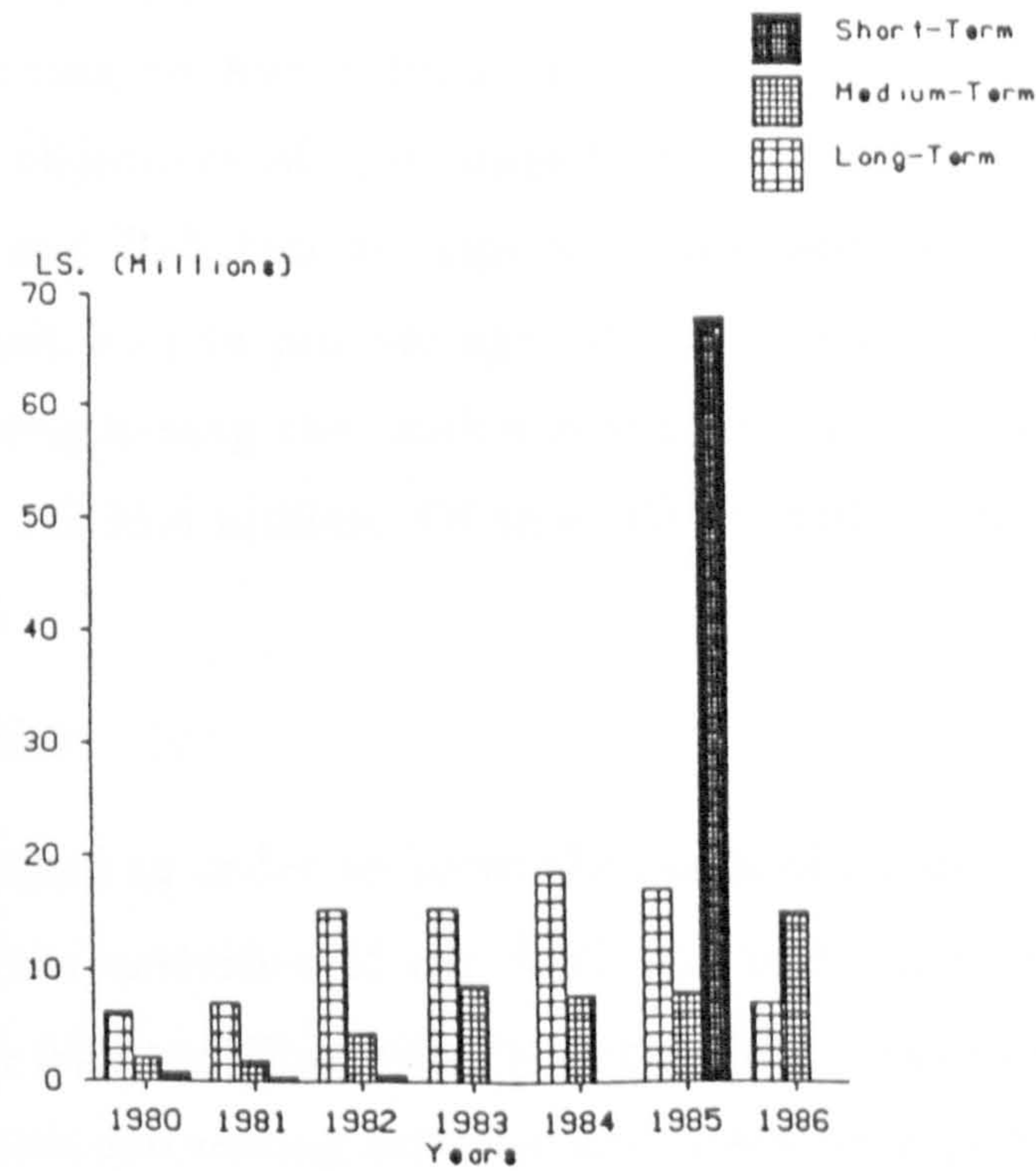
Figure 9.1 reveals that the loans approved by the Bank during 1980-1986 have lately been concentrated on short-term credit for which there is a great demand in the modern rainfed sector. Medium and long-term credit have been at a lower level, which indicates that the Bank is more commercially rather than developmentally motivated in its assistance to small farmers.

9.1.2. Sources of Capital

In 1982 the paid up capital of the ABS was £S 25 million. Prior to 1964 the paid up capital was only £S 3 million out of the £S 5 million authorised by the government. The governments' share was 40% while the rest was made up by the Bank of Sudan. This £S 3 million included about £S 0.75 million in uncollected loans made to individuals and cooperatives which were transferred to the Bank by the Ministry of Finance and National Economy. In 1964 the Bank of Sudan paid in full its share of £S 2 million bringing the ABS capital up to £S 5 million. In 1969 the Bank of Sudan bought out the government's share and provided the revised authorised capital of £S 7 million. The paid up capital was raised to £S 9 million in 1980 and to £S 13.1 million in 1981. In addition to this the ABS was authorised to borrow up to £S 3 million from the Bank of Sudan, at an interest rate of 6.5% annually. This rate was raised to 14.5% 1983, and since the ABS is authorised to

Figure: 9.1.

Total Loans for the Year 1980-1986



Source: Annual Reports of the Bank

charge its borrowers a maximum of 12% only at present, this source of liquidity is no longer used.

Apart from the capital provided by the Bank of Sudan, the main financial sources of the ABS have been the profit obtained in the course of its trading activities, the rent earned from the storage of crops and the interest on agricultural loans and commercial commissions. The ABS has also accepted deposits from the public at its commercial branches in Dongola and Zalingi.

In recent years the Bank has been granted loan facilities by international organisations such as the International Development Association (IDA), the African Development Bank and in addition certain facilities under the French Protocol². The IDA is at present financing an Agricultural Service Project which will be executed at farm level. The objectives of this project are to modernise traditional cultivation in Um Ruwaba and Rubatab; to improve production and marketing in the Kassala and Selaim Basin and to provide agricultural services through twelve of its branches, besides strengthening the bank's headquarters. The total cost of the project is estimated at £S 35.6 million. Of this, £S 18 million will be derived from non-Sudanese sources.

9.1.3. Investment Activities

Although it was established in order to serve the needs of small and medium-sized farmers, one of the first activities of the ABS was to finance large private cotton schemes in the White Nile and Blue Nile Provinces. Minor activities included financing mechanised sorghum harvesting schemes and machinery purchases. The indebtedness of the private cotton schemes reached a maximum of £S 5.7 million during 1967- 68. At the end of 1968 the ABS curtailed the financing of schemes which had failed to make repayments. However, since these schemes were important in providing a livelihood for the region's population (being the main source of cash, staple foods, fodder and water for animals), the government decided to take over

² Ibrahim, K. M., *The Experience of the Banks and other Sudanese Institutions in Financing Agricultural Projects*, Paper presented to the National Session on Administrating Agricultural Credit, Khartoum, December 1987, p.12.

the running of these schemes and set up an Agrarian Reform Corporation for this purpose.

9.1.4. Loans Procedures

In order to qualify for loans, the following procedures have to be followed and conditions fulfilled:

(a) The applicant should apply for the loan on the prescribed form(s).

(b) Documents, invoices and other certificates required have to be attached. e.g. estate search certificates, the licence of the scheme, a budget showing the estimated cost of the different operations, the amount of the required loan should be shown and the application's contribution should be stated clearly.

(c) The agricultural inspector of the Bank has to visit the scheme and write a comprehensive report about the scheme.

(d) Based on the above detailed information, the branch manager and the loan inspector will study the loan application to find out whether the project is viable or not.

(e) Loans which come under the financial powers of the branch manager shall be approved locally, otherwise the application is sent to headquarters to be studied and evaluated by the loan section who submit a note for final approval by the management.

As for the authorization, it should be noted that the branch manager has the capacity to approve short-term loans for up to £S 1000 for any single scheme according to the budget approved by headquarters for different crops. Also the management of the ABS are authorized to approve loans of short and medium term up to £S 3000 for one project. Finally, the authority for approving loans above £S 3000 is vested in the board of directors.

With regard to the repayment of loans, every loan provided by the ABS must have a repayment programme satisfactory to the Bank, but a borrower will be at liberty, on giving notice of not less than one month in the case of short-term loans,

two months in the case of medium-term loans, and three months in the case of long term loans, to make full repayment in respect of any loan before it becomes due and to pay interest only up to that date.

To sum up this section, it is clear that the conditions and policies adopted by the ABS, in common with the land policy, can only be met by a limited group, namely the merchants and commercial bourgeoisie. Only the merchants with large resources can afford to meet the Bank's requirements for getting loans. Thus one can argue that the government through its own Agricultural Bank is adopting policies that exclude the majority of the small farmers from any credit subsidies. This is in fact the case since the farmers lack the resources needed to satisfy the Bank's conditions for credit.

9.2. The Co-operative Societies

According to the ordinance of 1948, which came into force in September 1949, a co-operative society can be defined as "a society of ten or more members whose object is the promotion of the economic interests of its members in accordance with co-operative principles: provided that when one of its members is a registered society the number of members may be less than ten."

As in the case of most agricultural co-operatives, according to the ABS policy, the society should fulfill the following conditions:

- (a) It should be registered.
- (b) The general assembly of the society should approve the request for the loan;
- (c) The registrar of societies should approve and recommend the request for the loan;
- (d) The last balance sheet should be attached;
- (e) A list showing the property of the co-operative society and its market value should be attached and certified by the representative of the co-operative department in the region.

9.3. Farm Structure and Organization

The ABS distinguishes between three types of farms as far as the organization of production is concerned. This can be identified according to ownership and sources of finance. These include the following:

- (i) State farms;
- (ii) Private farms: managed and financed by private operators;
- (iii) Supervised farms: financed by the World Bank but owned and managed by private operators;

Initially the state mechanized farms were established to meet the following objectives as outlined in the five year plan 1970/71 - 1971-74:

- (1) to contribute to national income by raising output;
- (2) to strengthen the public sector;
- (3) to stabilize the prices of food grain i.e. dura;
- (4) to increase foreign exchange through exports;
- (5) to provide an example to be followed by the private sector.

The World Bank used its financial influence and weight to affect state policies and managed to subordinate the state farms to the interest of private capital accumulation. Instead of expanding production to contribute to the national food requirements the state farms were involved in improved varieties research and experiments for the benefit of private capital. Thus the role of the state farms in increasing production and productivity was ignored if not suppressed. Dura production on state farms has fluctuated sharply and in most cases has experienced a declining trend.

These financial losses were used by the World Bank as proof of the inefficiency of state farms and to press for the state's withdrawal from production. In fact the state farms were deliberately frustrated in mechanized production to prove the superiority of the private ventures in contrast to the public enterprises. Consequently, as a result

of the World Bank pressure, the state started to withdraw from production. As a result the state farms were reduced to a very small area of 800 feddans to conduct experimental research.

9.4. Methodology for the Case Study

9.4.1. Purpose of Study

The field work reported in this study is analysed in two separate parts. The part presented here concerns the role of Agricultural Bank of Sudan in rural development and the other, in Chapter Eleven, is concerned with the participation of the Sudanese Islamic Bank, in financing small farmers in rural areas. The main concern of this chapter is to analyse the field work on the role of ABS. It provides a survey of one of the main traditional financial development institution (ABS) in the country with the major aims:

(1) To investigate the role of the Agricultural Bank of Sudan and its significance in rural areas through the loans extended to the small farmers in the traditional sector.

(2) To analyse the economic and financial competence of the Agricultural Bank of Sudan (based on debt financing) and how far has it succeeded in achieving its objectives.

(3) To identify the environmental elements within which the Bank operates, which may influence its policies and the fact that small loans are costly to administer and have a comparatively higher risk.

9.4.2. Method of Study

The study is based on a case study approach. The data were collected during the months of February and March 1989 from three main sources. First, a questionnaire survey was undertaken on a random sample of 100 small farmers, concentrating on detailed agro-economic information including the size of farms, the kind of crops, annual income and the main source of income. Details of other financial inputs into agriculture and the agriculture credit were also collected. Secondly, informal

interviews were conducted with small farmers, discussing mainly their problems, opinions and attitudes to agriculture and to the whole process of development. Finally, interviews with many officials yielded a considerable amount of background information, and practical experience in the field provided useful insights about the nature of the problems.

9.4.3. Scope of Study

At the outset, the questionnaires were distributed among small farmers who deal either with the Agricultural Bank of Sudan (ABS), as a traditional development institution, or the Sudanese Islamic Bank (SIB), as an Islamic development organisation which has developed its main operation on a profit-sharing system.

Fifty out of the hundred questionnaire were given to the farmers who deal with the ABS in two areas: principally in Kamelen, the capital of the Gezira-Bahri, as well as Jaili. The remaining fifty were distributed to the small farmers who deal with the Sudanese Islamic Bank in two main areas, mainly Shehenab and Gezira-Islang.

It has to be emphasised that the main reason behind distributing this questionnaire in terms of two institution is to examine to what extent the concept of *musharakah* financing in agriculture (which has been initiated by the SIB) has succeeded, relatively speaking, in overcoming the problems of rural development in the Sudan.

9.5. Characteristics of the Sampled Areas

9.5.1. Land

The agricultural lands in the Kamelen and Jaili schemes are irrigated by gravity from river Nile. In addition to this, private land and leaseholds are also cultivated by some of the farmers. These private lands and leaseholds include the basins along the Blue Nile, irrigated by pumps or flood water and devoted to vegetables, fruit and fodder crops.

The main agricultural area is that which is under the scheme itself. In addition to crop production, some of the land is allotted for fruit and fodder production.

Some of the farmers, particularly the wealthy, were allotted holdings for permanent orchards basically to provide their localities with fruit.

Surprisingly, records on the quality of land in the scheme are not available, but it is the common belief in Sudan that the land in the north and north western areas is less fertile than that in the south. Reasons for this variation include soil erosion in the north due to grazing by the cattle of Arab tribes from the eastern bank of the Blue Nile and western bank of the White Nile and the nitrogen provided by the acacia trees in high rain areas in the south.

The majority of the farmers cultivate vegetables for their subsistence. Other crops which require a considerable effort, such as fruit and fodder and much attention like dura, wheat and forestry are cultivated by fewer farmers than those who cultivate dukhun and groundnuts.

9.5.2. Labour

The structure of the labour force in the Kamelen and Jaili schemes can be divided, according to source, into two broad categories:

- a. family labour;
- b. local hired labour;

Family labour in the scheme can be defined to include all members of the household such as the farmer, mother, father, wife or wives and children and other dependents all of whom contribute to the work of farming and depend primarily on the farm for their living. The average size of the family was relatively large.

In spite of its large size, the family labour contribution to agricultural production was very low. On average, less than 4% of the total labour force was provided by the family. The reasons for this low contribution included:

(a) the low farm returns and the hard terms under which credit can be obtained compelled the poor farmers to look for off-farm work to supplement their farm earnings.

(b) the marked tendency among the richer farmers to use hired labour rather than family labour. It was found out that only 4% of the total labour used was provided by family labour in the case of the richer farmers. In addition to its effect on the overall family labour used, the tendency among the more affluent to use more hired labour had an adverse effect on the poor families in the sense that the children of the latter made as minimal a contribution as the children of the richer farmers;

(c) certain agricultural operations are considered to be women's jobs. These include thinning, vegetable picking and the processing and collection of roots. Even for these jobs, women and children are called upon only when the farmers have insufficient cash to hire labour³.

b. Local Labour

This includes the casual labour living within the scheme area and constitutes by far the most important source of labour. Local labour includes different types of people like the tenant farmers, their families and other landless members of the household. Some of the tenant farmers and their families work as casual hired labour on other people's farms particularly for fruit cutting and vegetable picking, while the landless may be casually employed while performing some other jobs in the village such as lorry drivers, tractor drivers and domestic jobs performed during the slack period.

9.5.3. Farming Activities

The farmers in the scheme cultivate crops such as vegetables, fruit, and fodder. Production is concentrated in the area of the Nilien project and the Matrat project close to the River Nile. This land is very rich and the farmers cultivate fruits including oranges, lemons, grapefruit and mango. Vegetables include onions, leafy crops, okra, tomatoes, cucumbers and aubergines. In an experiment imported potatoes from Holland were planted in the scheme and the result was promising.

However, agricultural practices in almost all the projects in the area are sim-

³ Abdu, H., *Agricultural Bank of Sudan*, Khartoum, 1974, pp. 15-20.

ilar to the Gezira scheme and based on the share cropping concept. The system of shares among the partners was originated by the Sudan Government Inspector of Agriculture in the Tayiba Project in 1911. The system was based on the traditional system, followed along the Nile, of the division of crops among the landowner, the farmer, the waterwheel owner and the ox-owner. In the traditional system the farmer gets two-fifths of the crop for his labour. The rest consists of the reward to the suppliers of the other resources. The same proportion of 40% to the tenants was used from 1913 to 1950. This share covers the cost of labour, seeds, agricultural implements, use of tillage animals and the tenants' profits. Out of the remaining 60% the government takes 35% for paying the interest on loans used in the development of the Gezira scheme, for amortization, maintenance of irrigation works, canals and rents to the natives for the lease of land. The rest, i.e. 25%, is the syndicate share to cover the cost of roads, drainage, subsidiary canalization, clearing and levelling, agricultural supervisory staff, accounting staff and profits.

Share cropping was practiced in the scheme by many tenants particularly in vegetable production. The terms of share cropping vary between localities. The dominant system is of the tenant providing all the material, and paying for the contract work. Some tenant farmers share in the cost of hired labour for lifting and threshing, others deduct their share in the cost of hired labour from the other partner's share and some provide only the land. In all these systems, the final yield is divided equally between the two partners. Crop sharing in vegetables often occurs between the local people and the other partner who may be a tenant farmer himself or a landless member of the community. This could be due to the high returns from vegetables and to the fact that West African *fallata* settlers are not used to the crop and the problems of its marketing⁴.

When the scheme was established, the crops cultivated were limited to vegetables. This pattern remained the same for several years, during which time other crops were introduced. At present, the crops cultivated in the scheme include: veg-

⁴ Al-Ani, K. S., 'The Gezira Scheme in the Sudan', unpublished Ph.D dissertation, Columbia University, U.S.A. 1959, pp. 212-222.

etables, fruit, dura, forestry and fodder crops. Wheat is also cultivated on a very limited scale. The rotation itself has changed over time as a result of the advancement of agricultural research and the need to put more of the fallow land under arable crops. Two rotations are now followed in the scheme.

9.5.4. Capital Requirement for Each Main Crop

(a) Vegetables:

Cash returns per feddan are highest for vegetable crops. Working capital is needed for vegetable production through long periods and is offset by the almost continuous returns. Seed bed preparation continues for nearly two months and the land is ploughed many times between July and September to prepare a fine seed bed. Seeds are also purchased in July and planted in shades. Transplanting occurs in September and November. The high expenses incurred after November, in the cultivation of land for onions, are masked by the other vegetables' continuous returns. For this reason, the working capital requirement of vegetables are far higher than other crops.

(b) Livestock and Fodder Production:

The remaining farming activities consisted mainly of livestock rearing. These were owned by almost every farmer in the scheme to satisfy the family needs. The number and value of livestock owned vary considerably between poor and rich farmers. Livestock trials have been few and not very successful, and animal production is still regarded as part of the subsistence sector. The relative neglect of livestock is partly due to the complex technology involved in fodder preservation and partly due to the radical change in attitude required in transferring from traditional to commercial production, with its greater emphasis on quality rather than quantity.

Fodder is also cultivated by the farmers. The farmers are allowed to cultivate lubia as a fodder for their animals and land is prepared for this purpose in the rotation but the actual area cultivated diminishes with time. At present, very few farmers cultivate lubia for grazing their animals. Apart from dura straw (Gassab) which is stacked in the field, fodder conservation is not practiced in the scheme.

Livestock production in the scheme is characterised by communal grazing particularly during the rainy season, as well as by the widespread use of herdsmen. During the rainy season, from July until the end of August, livestock mainly depend on grazing the fallow for their food. Thereafter a few of the farmers, particularly the rich, purchase other feeds such as cakes and dura straw. Sales of milk are rare and characterised by low quantities if they occur. The main reason for low sales is the low milk yield. In some tribes, social customs also prevent milk sales. The receipts gained by the farmer are very low and result in positive periodical cash balances only in the case of the poor farmers who spend very little on the upkeep of their livestock. Among the rich farmers sharp decreases, at particular periods, in the cash balance can be observed due to purchases of cakes and dura straw.

From the above analysis the basic feature of farms in the scheme that emerges is heavy and continuous expenses incurred in growing the vegetable crop. With the other crops such as fruit, heavy expenses are limited to periods of planting and harvest. The manner and time period in which capital is needed by the farm was, generally speaking, uniform due to the prescribed rotation and the seasonality of the cash expenses associated with each crop. However, the amount of working capital required varies considerably.

9.5.5. Other General Characteristics

The Bank, as a formal financial institution in the country (in the two schemes under study as well as in other areas) is faced with considerable problems. Some of these might be mitigated with difficulty, while other cannot be eliminated. However, efforts are being made to try at least partial solutions. These problems are of a general nature and might be justifiably said to apply not only to the two schemes but to many alternative situations.

9.5.5.1. Storage and Marketing

Marketing of crops such as vegetables and fruits is a problem of considerable importance. The price which a crop fetches at harvest time is lowest in the area of production. Thus the problem is related to storage and transportation. Storage,

which is an important part of the marketing process, is still a difficulty though it is receiving a good degree of consideration and promising improvements have been planned and are being put into operation. These are seen as partially offsetting the transportation bottlenecks. However in the case of perishables, particularly fruit and vegetables, there are many problems. Their seasonal nature and perishability calls for careful handling, particularly in tropical countries. There is a need for refrigerated trucks and vehicles and air-conditioned stores if the bank is to attempt to balance supply and demand.

The bank must therefore bear in mind that efficient marketing and prosperity go together. Although underdeveloped marketing may be more an effect of underdevelopment than a cause, increased marketing efficiency must be sought at the same time and with the same intensity as increased and more efficient productivity.

9.5.5.2. Transportation

In a vast and scantily populated country like the Sudan transport facilities are of paramount importance. One of the main difficulties facing the farmer is his inability to find relatively easy transportation of the crops he sells from the village to the urban centres.

The transportation of the agricultural produce from production areas to consumption centres is a considerable problem confronting the bank. Transportation is one of the basic cornerstones of marketing. It has a direct effect on both internal and foreign trade because of the distance between production and consumption centres.

Bad roads and the small number of vehicles and lorries add to the problem. Most of the roads are not asphalted, thus causing rapid damage and depreciation of vehicles and lorries. They are also closed throughout the rainy season. Thus it is not uncommon to find an accumulation of crops in production centres awaiting transportation. This bottleneck occasionally materialises due to the fact that transportation costs rise very steeply forcing producers to sell at low prices to those merchants who have vehicles to transport the crops to the markets.

Among the factors that contribute to this problem are the undeveloped and unutilized river routes. If these were well utilized they could provide a smooth and efficient means of transportation.

9.5.5.3. Securities

A reasonable and satisfactory form of security is one of the key pre-requisites of a successful credit system at the Bank. It constitutes the sole guarantee for the smooth circulation of funds, for financing agriculture efficiently and effectively. When credit institutions extend their loans they usually lend on the basis of the security offered so that payment incapacities do not paralyse their functions.

A substantial majority of farmers in Sudan cannot offer the types of securities required by the Bank. Unregistered lands cannot be taken as security because the question of ownership has not been clearly defined. This case is usually a characteristic of the western regions of the country. However, land fragmentation, a characteristic dominant in the northern parts of the Sudan, is another handicap to taking land as security. Here, as was pointed out earlier, the land is fragmented into such small farms that a unit by itself does not constitute a satisfactory security for adequate loans. Although it is tilled by one person, the ownership is shared by many due to the inheritance distribution according to Islamic law. The Bank's experience in this respect shows that if a customer fails to repay the loan and the mortgaged land has to be sold, his fellow villagers shrink from buying it because, as relatives, they resent such a measure.

9.6. Type of Activity

The farmers surveyed produce vegetables, fruit, fodder and other crops. Vegetables accounted for 70% of farm output and fruit production accounted for 22%. They also produce fodder which accounted for 6% and other crops accounting for 2% (as shown in Table 9.1.).

Table.9.1.

TYPE OF ACTIVITY

Crops	Percentage
Vegetables	70.0
Fruits	22.0
Fodders	6.0
Others	2.0
TOTAL	100.0

Source: Survey finding

This is indicative of the fact that the farmers are experienced in agricultural practices. Although fodder is important it has been consistently neglected by the agricultural authorities running the scheme. On the other hand, forestry is a vital and integral part of the farming system and can increase crop yields and provide the dry weather feed for goats, camels and sheep. Despite this fact forestry too has been seriously neglected.

The data collected shows that over 36% of the farmers in question have started farming since 1950. 24% started farming between 1960 and 1970, while 40% of the farmers have started since 1975. These last 40% entered agriculture after realising that the employment opportunities and prospects for growth are still greater in agriculture than in the other sectors of the economy. Presumably the other main factor affecting exactly when they started farming is their age. Therefore, age seems to be a key factor in determining the level of employment in agriculture. The older farmers started farming since 1950, whereas the young have started since 1975.

However, since the mid-1970s the Sudan government has been involved in huge agricultural development programmes. There was a call for Arab surplus capital to be invested in the Sudan. Thus, the Arab Authority for Agricultural Development was set up in the country with considerable funds. Their efforts were augmented by the ILO and other international specialist financial institutions, which recommended

that the potential for development in the Sudan still lies in agriculture. Therefore one finds the concentration on agriculture in general is relatively high. This could be taken as additional evidence for the reasonably high percentage of farmers who started working in the mid 1970's (i.e. 40%).

9.6.1. Family Structure

Generally speaking, the family structure in Sudan is an extended one, and family ties are strong, as those in employment support those without income. The family as a unit, or its head, selects one or two members of the family to seek employment outside its traditional area. The family continues to support those members until they find employment or become convinced that there is no hope and return home. If employment is found by those who leave, earnings are shared with those who remain in the agriculture activities. Within this social set up, individuals in need of resources were provided for by those members of the extended family who were in a position to assist. Natural cooperation is widespread among people in most aspects of life, both social and economic, and there is an obligation among the kin, neighbours and friends to help the needy. Borrowing money in the case of illness, funerals and other unexpected disasters, as well as small interest-free loans in the case of weddings and other similar occasions, is fairly common.

In this way the risks associated with seeking new employment are shared between all members of the family. This procedure permits a more satisfactory response to employment and income difficulties than would be possible on an individual basis. But this affects the standard of living of the group and always keeps the farmer in a state of struggle to provide basic needs rather than being able to save. Therefore the accumulation of capital is slow and the chance for the farmer to renew his agricultural inputs is consequently low.

The data revealed that 44% of the farm families had more than 10 persons which indicates that the family size in rural area in Sudan is very high. 40% of the farm families have between 6-10 persons, which is still a relatively large family size. 12% of the farmers have no family either because they have not married yet, or because

they cannot afford to get married. The remaining 4% are married, but have small size families ranging between 1-5 persons as shown in Table 9.2.

Table. 9.2.
FREQUENCY DISTRIBUTION OF FARMERS
ACCORDING TO FAMILY SIZE

No. of members per household	No. of farmers	No. of farmers as a % of total number
None	6	12
1-5 persons	2	4
6-10 persons	20	40
More than 10	22	44
TOTAL	50	100

The farmers in the two schemes under study can be divided into two main groups. Firstly large farmers who cultivate between 10-20 feddans through large pump schemes are usually well-off and can finance their own cultivation. Secondly there are the small farmers who work their own land, in some cases with the help of seasonal labour.

The negative attitude of the farmers and their family labour towards agricultural work in the scheme has significantly reduced the role of this important source of labour supply and increased the demand for labour from other sources. This strong aversion of farmers and their families to engage in agricultural work has been repeated in other schemes of the Sudanese Islamic Bank to one extent or another. Several social and economic reasons for this attitude were noted on these schemes and may be discussed briefly here:

(1) For social and Islamic reasons, female work is regarded as a loss of face and the general feeling is that a women's place is at home. This restricts the female side

of the potential family labour.

(2) There are also problems regarding the commitment of farmers themselves to their farms. For example from the very beginning tenants in the Gezira scheme objected to being called tenants at all. This objection was largely connected to their social feeling that they are “employers” not “employees”. Manual work is considered degrading and tenants prefer to engage in more “honourable” activities and leave the bulk of the manual work to hired labour. Many tenants and/or their families tend to engage in some form of off-tenancy economic activity for the dual purpose of satisfying this social feeling and of supporting family income. In this way they can meet the high expenses of maintaining a socially desirable standard of living as well as financing hired labour. Other factors which have encouraged the tenants to engage in such activities include the low and uncertain income from agriculture, the desire to avoid going into debt, and the fact that incomes from such activities are likely to be stable throughout the year.

The amount of labour used depends on the size of the farm (as shown in Figure 9.2). On average it is found that landowners with large farms hired more than 10 workers (which accounted for 32%) and those with small size farms hired between 1-10 workers (which accounted for 68%). The distribution of external labourers used is shown in Figure 9.3 . But both small and large farms are labour-intensive, and can absorb employment from outside the agricultural areas; those idle crowds in shanty towns who desperately need food, could be employed and turned into a productive force instead of a purely consuming group.

9.6.2. Farming Size and Cultivation Patterns

It might be said that farm size is relatively important because those whose farm size is between 11-25 feddans represent 30% of the total and those whose farms' size is small, ie 0-5 feddans represent 20%.

The average farm size in the sample under study varies between 11-25 feddans, which accounted for 30% of the total. Those with small farms (1-10 feddans) accounted for 28% and those with larger farm size (10-51 feddans) accounted for 42%

Figure: 9.2. Correlation Between Farm Size and Labour Used

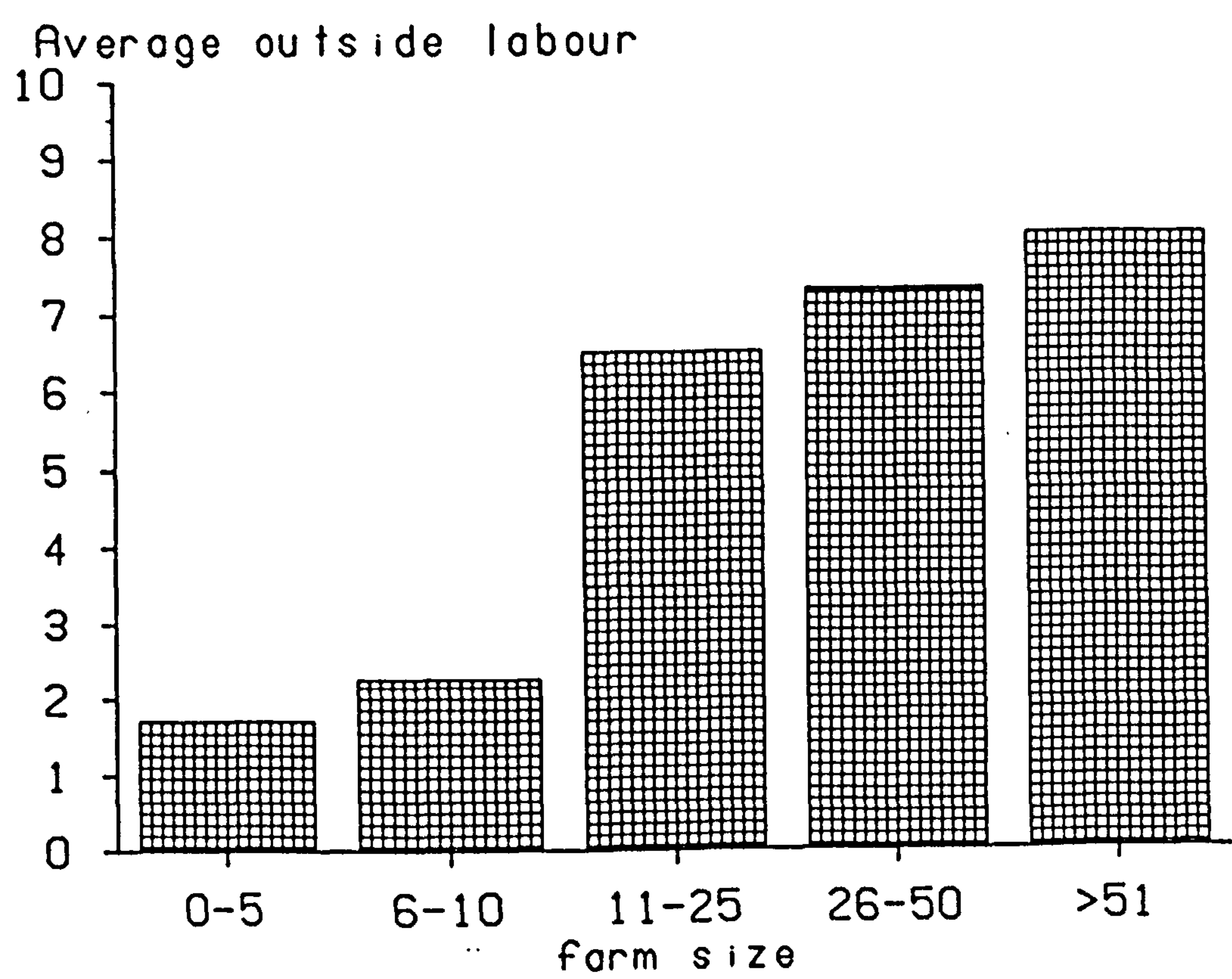
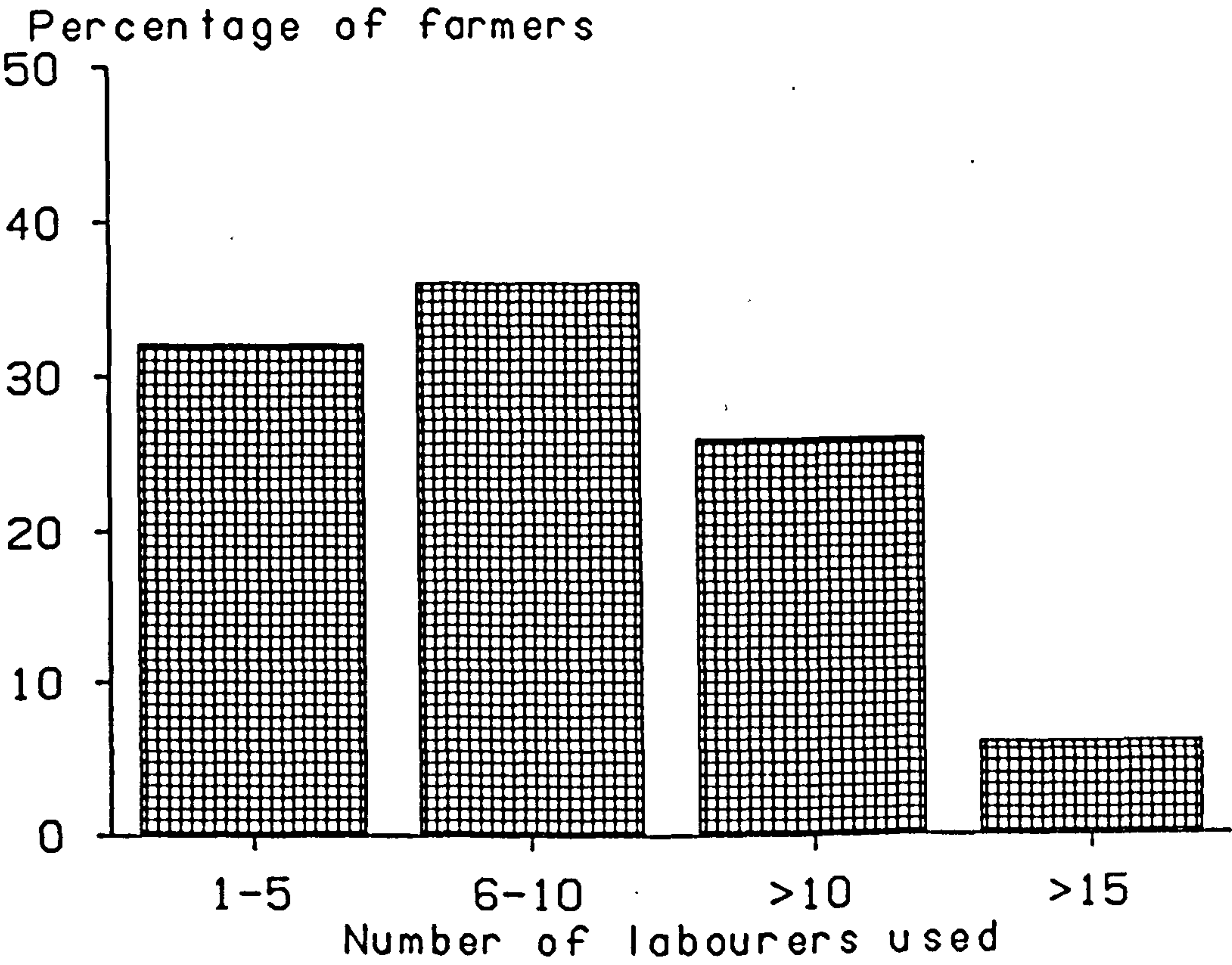


Figure: 9.3. External Labour Used



(as shown in Figure 9.4.). This means that the farm sizes on average are relatively large. In fact, this could be attributed first to the fact that the Sudan has, as is well known, the largest arable land area in Africa, and that there is in general no restriction on land ownership. Secondly, it was only recently that land tenure has been regulated by laws and government regulations.

44% of the farmer's hired labour from outside to cultivate their farms, while on the remaining 56% of farms the work was carried out by the farmers themselves. This provides further proof to justify the argument above that this farming area could secure employment opportunities for the unemployed from other sectors.

The farmers who cultivate land twice per year represent 52% of the sample, and 40% use land more than twice a year. This indicates that land is used to the maximum. This might be at the expense of soil quality which may deteriorate rapidly. Thus, the role of the Bank is expected to be crucial in this respect, providing fertilizers, and other necessary agricultural inputs, including advice on avoiding over-cultivation.

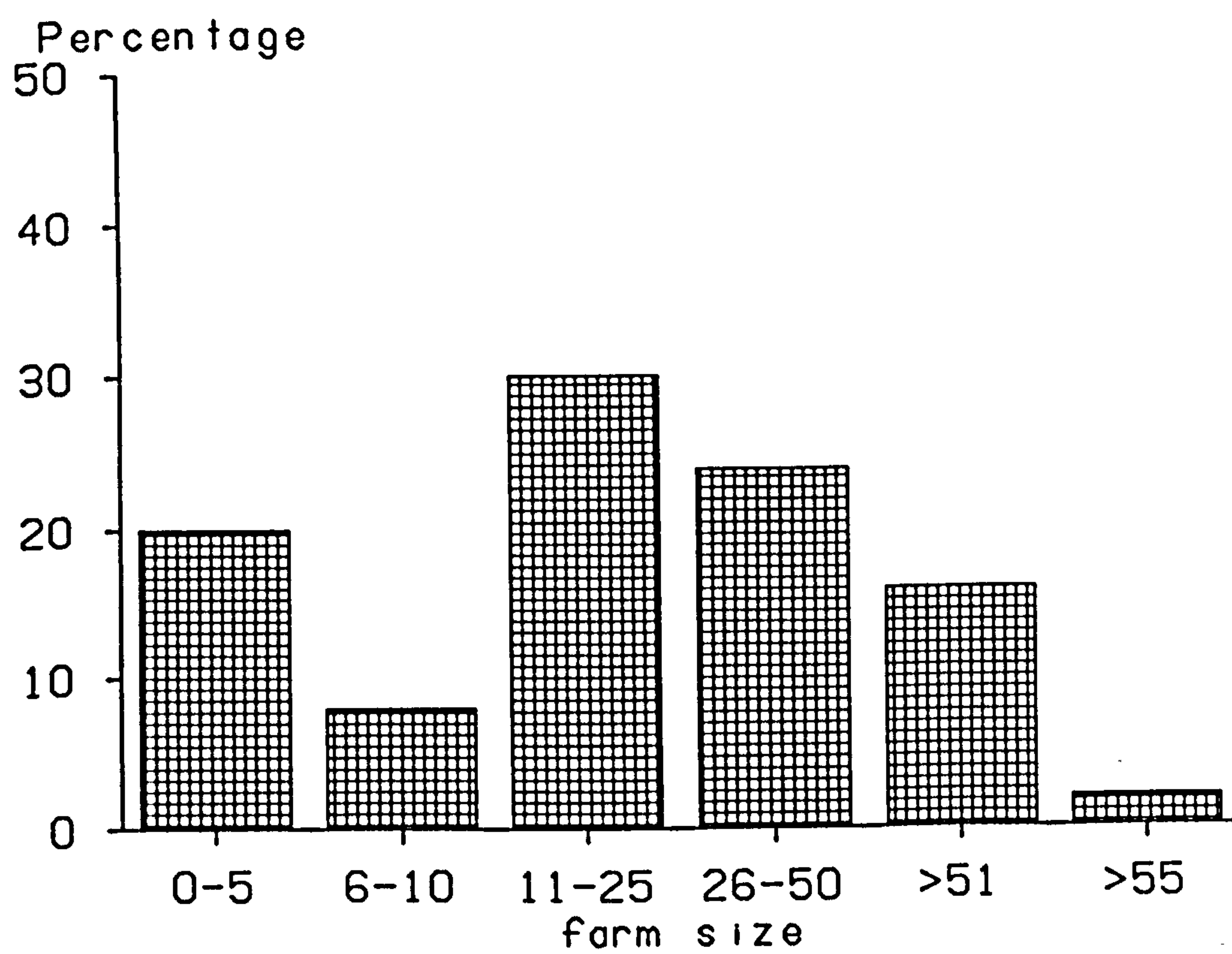
9.6.3. Crop Production and its Importance to the Farmers

As far as the types of crop are concerned, farmers were asked about each kind they grow. The survey shows that most farmers cultivate more than one crop. The results are as follows:

Vegetables:

Vegetables are dominant, and all farmers produce them because their turnover is high and they are marketable. The farmers grew 98% of their vegetables for subsistence and cash sale. There is a marked increase in the consumption of vegetables particularly in the urban areas. Owing to an increase in real incomes and an increased awareness of the nutritional value of vegetables, their cultivation is quickly developing into a commercial enterprise.

Figure: 9.4. Farm Size Distribution



Fruit:

Fruit crops also occupy an important position. 24% of farmers cultivate them because of their marketability. In addition, the high increase in cultivation may be attributed to the change in the dietary habits of the farmers which also explains why their consumption almost doubled.

Fodder:

In recent years farmers have been more concerned with fodder cultivation especially after the disappointing rainy seasons and the droughts in the Sudan which have occurred since 1984. Lubia is the main fodder crop and provides valuable feeding for working bulls and other livestock on the scheme. It is often used by the farmers to attract local labour from adjacent areas by offering them lubia as grazing food for their own animals. Under good management one to three heavy crops can often be obtained, and this is then followed by a yield of beans. It is generally much neglected, however, and careful practices could multiply the crop as much as fivefold, since it responds more readily to good treatment than dura. It is essential to add here that the Bank has an important role to play in providing insecticides and fertilizers to farmers to increase their gains from this crop.

Dura:

Dura is comparatively easy to grow as it requires only about 90 days to get ripe. Yet its production in the scheme accounts for only 2% of the total output. The production of dura can be increased due to its central position in the main diet of the Sudanese people. The Bank, through extension services, is now in a position to encourage dura production. Especially as in the last five years, when the rains had failed, shortages of foodstuffs, in general, are increasingly encountered.

Forestry:

It has been noted that only 2% of the farms contained trees. At least half of Sudan is either desert or semi-desert with rather poor forestry potential yet the country has about 270 million feddans of forest and these represent 36% of the

total cultivated area.

Forest cultivation appears to be limited due to the adverse weather conditions. Generally, some of these forests are important to the local rural population in providing raw materials for industries, including clothing and edible fruit, while others have a high market value.

So far, only the productive potential of forestry resources in Sudan has been highlighted but there is an increasingly important conservation potential. In most cases this is not unquantifiable in a country where half the area is desert and the rest is comprised of mostly sandy soils highly vulnerable to erosion. The protective role of forests in the conservation of soils, the improvement of pasture, increasing agricultural production, the containment of desertification and amelioration of climate are untapped potentials that may have an important bearing on future agricultural developments. Thus, the Bank could enhance such efforts if it were serious in its determination to play a significant role in development.

Sugar:

A further import-substitution crop is sugar. Sugar consumption has been increasing significantly in Sudan, yet the farmers do not produce sugar at all. It is cultivated in large-scale irrigated schemes in Central Sudan and every project is owned by the government. Taking into account their limited resources of land and capital, farmers are not in a position to cultivate sugar cane at present.

Wheat:

Wheat is an important part of many diets, yet its production by the farmers surveyed accounts for only 4% of the total. According to a UNDP/IBRD study it was found that wheat is not a competitive crop given the present levels of yield. Yet, there is a strong case for wheat on the following grounds⁵:

(a) although the financial cost analysis of yields shows wheat in a poor light, an economic analysis using opportunity costs rather than financial costs of certain

⁵ (UNDP/IBRD), *Planning Project, Study of Cost of Production and Comparative Advantage of Crops in Sudan*, Khartoum, May, 1982, pp. 24-27.

inputs like machinery and water show the wheat crop to be quite competitive;

(b) the alternative to local production is import from abroad which would put an additional burden on the balance of trade;

(c) the domestic production of wheat affords a certain measure of security for the country as well as for individual producers.

Therefore, the Bank may encourage the farmer to grow wheat because its production is vital not only as human diet but as a measure of security for the country. Thus, here again, the Bank could demonstrate its concern in funding this strategic commodity and help in relieving some of the pressures on the balance of payment and thus reduce national deficits.

The survey reveals that the farmers consume more than one crop from abroad including sugar and wheat among others. This puts additional burden on the Bank and its extension service, in convincing the farmers to change their consumption pattern or to encourage cultivating these crops if their production is economically feasible.

The farmers were asked to indicate the relative importance, in their view, of the dura, dukhun, groundnuts, sesame, sugar crops. It was revealed that all farmers consider more than one crop as of relative importance. Therefore for the five crops mentioned above, every one is to be taken independently of the other four.

(a) Dura:

89% of the farmers have stressed clearly that dura is considered a very important crop. Thus the farmer is heavily dependent on this crop for food. Dura is the main staple foodstuff of Sudan and is popularly known as "sorghum". Sudan has to meet a shortage of dura through imports, despite being a country with plentiful cultivable lands, and an amount of rainfall that suits dura cultivation. The shortage seems unjustifiable.

(b) Dukhun:

In contrast to dura, 48% of the farmers consider dukhun as an unimportant crop whereas 14% of them regard the crop as very important. Moreover, 16% of the farmer considered dukhun as important while 22% regard the crop as less important.

(c) Groundnuts:

Groundnuts are widely grown and are often planted after maize at the beginning of the rains (March/April). The crop is interplanted with dura and cassava. 38% of the farmers consider the crop as important, whereas 24% of them regard it as very important. 28% of farmers think that it is less important whereas 10% regarded it not important at all. Hence, the majority of farmers favour the growing of groundnuts, a finding which indicates the necessity of adopting a certain strategy for crop cultivation in the country.

(d) Sesame:

Although sesame is considered to be a major oil seed crop, more than 56% of the farmers felt that it is not important. For the whole country, sesame will remain an important crop as it is used to extract oil from the fodder not needed for animals. However, the fact that farmers showed less concern about this crop is not surprising. Firstly, it is water-absorbant, and farmers might not have the adequate pumps to shift water from the Nile for sesame irrigation. Secondly, its production is labour intensive and there is an acute shortage of labour.

(e) Sugar:

The importance of sugar has been increasing significantly in Sudan. 92% of the farmers consider sugar as a very important crop. The demand is far in excess of the supply and the government is still importing sugar in large quantities in order to satisfy the total demand. New factories are subject to many problems resulting in under-utilised capacity. Nevertheless, some studies seem to conclude that "Sudan seems to have a potential comparative advantage in the production of sugar"⁶.

⁶ World Bank, *Sudan Export Development Study*, Report No. 4263, Main Report, Vol.1, 1979, pp. 74-85.

9.6.4. Farmer Cash Crops

The orthodox definition of cash crops is "those crops that farmers produce for cash sale, they are most likely not consumed at the farm level and are either processed within the country or exported". It is argued, however, that this definition no longer fits the emerging economic conditions and population distribution structure in most independent Third World countries, (including Sudan) where there is a growing demand for the traditional foodstuffs in the urban areas. Thus, the crops discussed below should not be taken to be only "cash crops" in the orthodox sense.

The farmers were asked to indicate which cash crops they cultivate and were given four specified types (cotton, sugar, groundnuts and other crops). It is apparent that a farmer may cultivate more than one type of produce. The results follow:

(a) Cotton:

Though in the past cotton was considered to be the main cash crop for the farmers in Sudan, it has been noted that this situation has changed and only 4% of the farmers grew cotton as a cash crop. The major factor attributed to the rapid decline in cotton production was the absence of incentives for the farmers to produce the crop due to falling prices. Cotton farmer's net incomes have actually declined as costs increased. There are problems in obtaining fuel, spare parts and inputs of good quality. Taking into account these problems and due to limited resources of land and capital farmers are not in a position to cultivate cotton as a cash crop.

(b) Sugar:

Sugar consumption has increased very rapidly due to a rising population as well as consumption per capita growth in recent years, which put the government under heavy pressures to import large quantities of sugar for domestic consumption. However, it was noticed that all the farmers did not grow sugar as a cash crop because they lacked the finances to invest in its cultivation.

(c) Groundnuts:

The production of groundnuts has been steadily increasing since the Second World War. This rising trend is attributed to the world shortage of edible oils, the high stable prices of groundnuts compared to other crops and the ever increasing demand for oils as a result of a rising standard of living. Unfortunately, only 4% of the farmers grow groundnuts. The Bank can encourage the farmers to cultivate this crop due to its central position in providing for local consumption as well as for export.

(d) Other crops:

Vegetables are the main cash crop and 94% of the farmers cultivate them. The crop provides a valuable source of income to the farmers in the scheme.

9.7. Farmer Income

78% of the farmers have indicated that their annual income, on average, is more than £S 3000. This group can be regarded as richer farmers in the Sudanese context. 22% replied that their earnings from agriculture varied from £S 2000 - 3000. These farmers can be considered as poor in the Sudanese context (Table 9.3).

Table. 9.3.
ANNUAL INCOME OF THE FARMER

Income	Percentage
£S 1000 or less	2.0
£S 1000 - £S 2000	2.0
£S 2000 - £S 3000	18.0
More than £S 3000	78.0
TOTAL	100.0

Source: Survey finding

Generally, it has been noticed that the majority of the farmers are relatively well off financially and their annual earnings are more than £S 3000. This is due to the fact that these richer farmers have been in farming since the 1950's during which some savings were possible. Therefore, the older are richer whereas the younger are poorer. Age seems to be a key factor in determining the level of savings. Only the older, and more established farmers, are able to save. This might be attributed to the following:

Older farmers have wider experience in managing farm production in general. They might have had good opportunities in getting cheap agricultural inputs in the past, and have had more access to credit from banks. Moreover they have more expertise in dealing with hired labour; because they are financially better off, they can transport these labourers and maintain their living and pay them throughout the cultivation period. However, these possibilities may not be available to small farmers as they are financially weak and cannot pay or maintain labourers for long during the cultivation period. In addition, they have less access to financial institutions, and less experience in farm management in general. However they are likely to welcome dealing with Islamic banks especially on the basis of equity capital. Therefore, it is natural that older farmers may be more resistant to new innovations such as Islamic banking than the young. This is a problem for the Islamic banks. The younger family heads may need funds, but they have no savings to put in the banks.

Due to inflation and the economic deterioration in the country by and large, the income from farming is not sufficient to support farmers families . 60% of the farmers have indicated that their annual income from agriculture is insufficient, whereas 40% of them pointed out that their income earning is adequate. The major factor attributed to this is the family pattern of expenditure in the rural areas where food consumption constituted the most important item of family expenditure. Although more uniform throughout the year, increases in consumption occur at certain period depending upon the availability of surplus funds and the incidence of ceremonies. For each farmer, heavy expenses were incurred during payment of the first profit

from certain crop sales. At this period most of the farmers purchased certain food items in large quantities to satisfy their family needs for long periods; and they also purchased meat and clothes. The importance of this period for the higher asset owners was less as they had enough cash to purchase their food consumption requirements at any time.

During the cultivation period, called *masor*, spending on agricultural inputs is very high for poor farmers, and constituted no less than 80% of the farmers' total spending. This implies that poor farmers are likely to be under pressure to maintain their normal consumption spending, and are therefore liable to exceed their normal income level, and are thus subject to debt. However, heavy expenses coincided with the two Eid ceremonies and with the pilgrimage period.

Most of the farmers in the scheme, supplement their farm income by off-farm earnings. The sources of this are briefly outlined:

1. earnings from activities allied to farming. These include the poor farmer's work for hire and wages gained by working as *Khafir* guardians;
2. earnings from business which can be subdivided as follows:
 - a. earnings from small businesses such as handicrafts, wood collection, labouring on building sites, roads, etc. and lorry driving, among others.
 - b. earnings from big businesses such as; shopkeeping, trading in crops and livestock, lending, hire of machinery and transport facilities and earnings from flour mills, etc.
3. Earnings from social transfers like remittances from absent members of the household, gifts for the farmer's ceremonies, other gifts and the like. Recently, remittances from Sudanese living abroad have become a source of additional liquidity for farmers. Individuals from the Northern Region were the first to travel abroad looking for better work opportunities. They send back to their families and relatives a considerable amount of hard currency which can either be consumed, kept or invested.

The farmers as can be seen from the above, varied widely in their earnings from

each source and in their total off-farm income. The richer farmers earn predominantly from outside business activities. They drive tractors, combine harvesters, lorries and run shops. Their earnings from shops were more or less uniform throughout the year. Earnings from other ventures depend upon the agriculture calendar. For the richer farmers, their main off-farm earnings come from shops and the renting of both their buses and lorries in the transportation of farm crops. For these reasons, their off-farm earnings are more uniform throughout the year.

Most of the crop production expenses and other expenses of the farmers were covered by borrowing. 42% of the farmers are either borrowing from relatives or from private sources outside the family. Moreover, 8% of the farmers received credit from the banking sector while 50% of them borrowed from other sources mainly *shail* merchants, as shown in Table 9.4.

Table. 9.4.
BRIDGING THE FARMER'S FINANCIAL GAP

Type of lending	Percentage
Borrowing from relatives	22.0
Private sources outside the family	20.0
Banking sector	8.0
Other sources	50.0
TOTAL	100.0

Source: Survey Finding

The credit requirements of the poor farmers for production and consumption are greater than the requirements of the rich farmers. Moreover, the farmers with a low income need more consumption credit than credit for production. As a consequence the poor farmers enter into *shail* transactions early in the crop season, while the other group resorts to *shail* late in the season. The poor farmer is therefore more prone to *shail* and his *shail* market-price ratio is lower relative to the ratio of the

other group. However, for both these groups *shail* reduces net returns.

From the figures it seems that the role of the Bank in supporting agricultural producers is very weak or even negligible. The farmers who borrow from the Bank is only about 8%. This implies that 92% of the financing is met from other sources, either from the *shail* system (which is very effective particularly in rural areas) or by borrowing from relatives and private sources outside the family. Therefore, the *shail* and other non-institutional sources of agricultural credit will continue to be important to the farmers in the scheme for sometime to come⁷. Solutions to the problem of *shail* will need gradual introduction to lessen the stresses that will result from changing an established custom and way of life.

One of the ways to combat *shail* is to increase farmers' net returns. Farmer income could be increased through (a) increasing the supply of labour, (b) reducing the cost of input factors for the farmer, and (c) actively supporting the production and marketing of the farmers' other crops.

The supply of labour could be increased in two ways: more use of family labour, and by bringing in a greater number of workers from outside the farm at the time of heavy work schedules. Use of family labour would make the farmer devote a greater portion of his borrowings to food consumption rather than to paying hired labour. Increasing the supply of labour could theoretically be expected to bring down wage rates. In such a case, farmers would need to borrow less from the *shail* system.

The cost of input factors, if reasonably low, could lead to increase in farmers net returns. The higher the net returns the farmer has, the less he could be expected to resort to *shail*.

Thirdly, the incidence of *shail* could be lessened by the erection of grain storage facilities. This is not to suggest sophisticated silos. Stores could be constructed from local materials either in the villages or the block headquarters. Farmers would keep their surplus grain in these stores from which they could draw for family

⁷ Adam, F. H. and Apaya, W. A., 'Agricultural Credit in the Gezira', *Sudan Notes and Records*, Vol.LIII, Khartoum, 1972, pp. 113-114.

consumption at times of need or for cash sale. An alternative arrangement would be for all farmers in the village or block to deposit a minimum quantity. Should a farmer withdraw his whole amount and yet require more, he could either buy in cash from the store or be supplied on credit to be repaid in cash or in kind.

The farmers were asked about their main source of income. The majority of the farmers (94%) stated that their main source of income is agriculture. However, this trend has been changing in recent years due to the deteriorating situation in the rural areas. 26% of the farmers supplement their farm income by off-farm earning. We may illustrate the situation of income for the poor farmer or tenant from a single example. For the poor farmer or tenant, income earning is coming from, for instance:

(a) While all household members are engaged in the production of crops, after the harvest period, three sons work in the mechanised farming schemes;

(b) two sons migrate for work in Khartoum, sending remittances from time to time. The remaining members of the family cultivate the land.

The farmers were asked about how they financed their seed input. Three options were available for their response; from themselves, bank loans and other means. The results show the following:

Alternative one:

Self-financing: The majority of the farmers (58%) indicated that 100% of the financing of seed inputs were met by themselves. As was mentioned earlier the farmers are relatively rich, well-established and a large number have been in farming since the 1950's. During the years certain savings were made. Some of the savings are allocated for buying seed inputs. Farmers tend to depend on themselves rather than the formal institution or other means in financing their seed inputs.

Alternative two:

Bank loans: The Bank's role as a formal source of credit to the farmer in the rural areas is virtually non-existent. Only 4% of farmers stated that all their seed

inputs are met by a loan from the bank. This will support the argument that the Bank's role is very limited, whereas the informal sources are more effective in financing the agricultural inputs as shown in Table 9.5.

Table. 9.5.
FARMER MODE OF FINANCING SEED INPUTS

Source of Finance	Percentage			
	25%	50%	75%	100%
The farmer	12	16	14	58
From a bank loan	72	16	8	4
Other means	-	-	-	100

Source: Survey Finding

Alternative three:

Other sources: All farmers (100%) resort to traditional borrowing from other sources, mainly the *shail* system. W. Y. Magar, for example, has estimated that 60-90% of tenants practice *shail* for dura, 45% for wheat, and 40% for groundnuts. It is likely that debts in the informal sector are increasing. With low yields, and the rising cost of labour and inputs, the buying power of the tenant has been reduced and he has been forced further into debt. Exorbitant interest rates leave no margin for any investment in the holding, and productivity remains low⁸. The Bank can relieve certain pressures on the farmers if it is serious in its desire for agricultural development.

It thus appears that the *shail* system as a informal sector in Sudan is very powerful in extending loans to small farmers in comparison with the formal sector. However, this phenomenon has been analysed below in order to throw light on the

⁸ Magar, W. Y., 'Farms in the Gezira', in *the Agricultural Sector of Sudan, Policy and Systems Studies*, Zahlan A. B. and Others (eds.), Ithaca Press, London 1986, p. 152.

reasoning behind the weakness of the formal sector of the government institutional lending in Sudan. It will also attempt to explain why the informal sector through the *shail* system has played a very vital role in financing agriculture credit in the country, and why this will remain the case for many years to come, although institutional credit (through ABS) for agriculture has been increasing as in Sudan.

9.7.1. Lender Characteristics of the Formal and Informal Sectors

Generally speaking, the informal capital markets in developing countries consist of two segments, the non-commercial and the commercial. Loans extended by friends or relatives, mostly without interest, constitute the non-commercial segment. In the commercial segment a range of people like crop buyers, landlords and professional money lenders, etc. operate. These agencies function outside the banking systems, and are neither regulated nor effectively monitored by any central authority⁹. In most developing countries informal sources still meet 50-80% of the credit needs of rural people. Governments have been hostile to informal lenders and have viewed them as exploiters of helpless peasants. Despite this, money lenders have survived almost everywhere, implying their financial viability, adaptability to rural conditions, and most of all acceptance by their rural clients. Ironically, rural people attach more importance to securing a good credit rating with money lenders than with formal lenders.

The informal rural credit market is still playing a vital role in Sudan. The differences between the two sectors of the dualistic rural capital market should be examined in order to see why the informal sector (such as local merchants, larger farmers-including landlords lending to tenants and full-time moneylenders) is perceived as superior than the formal sector and why the small farmers still prefer to deal with the informal credit sector.

The formal or institutional lenders supply capital to agriculture from urban sources (public, like the ABS, or private) while informal lenders provide capital which is often rural in origin. The methods by which credit is made available to

⁹ Padmanabhan, K. P., *Rural Credit, Lessons for Rural Bankers and Policy Makers*, Intermediate Technology Publications Ltd, 1988, p. 88.

farmers in these two types of market offers a number of contrasts:

(1) In institutional lending, like that of the ABS, we find that most loans require that the farmer sign a promissory note that often demands a co-signatory. Many such loans (especially medium and long term) also require a mortgage or real collateral; collateral values may exceed the amount to be loaned. Application procedures are very often complicated and the farmer has to go to an office and answer questions, and finally talk to a loan officer or the manager. The farmer must present a series of forms, all properly stamped. These forms will vary depending on whether this is the first loan being requested from the institution, whether he is a large or small farmer, and whether he has friends and/ or influence in the lending institution. In many cases the borrower is asked to come back in a few days, a few weeks, or even a month or more to be informed of the preliminary decision on his loan application.

In the case of the Agricultural Bank of Sudan even if the loan has been approved the farmer does not receive the funding at one time. There are certain steps and measures according to which the Bank grants its loan in different stages, related to the type of loan. Such a long procedure however, has also discouraged small farmers who need financing in order to cover the cost of following up each agricultural stage¹⁰.

(2) The informal credit market consists of relatively localized transactions of money, real goods and services among friends, neighbours, relatives, landlords and moneylenders. The *shail* merchant in a village knows virtually all the *shail* merchants in the neighbouring villages. Territorial boundaries of the area, within which each merchant operates, are well observed with no merchant entering the territory of another. Many loans in the informal market carry no conventional collateral; here the guarantee for repayment is the verbal promise of the borrower. In other cases, however, there may be an informal mortgage on land or an agreement that the

¹⁰ Rehiman, A. A., 'Evaluation of the Agricultural Bank's Contribution to Different Agricultural Sub-Sectors, 1959-1977', unpublished M.Sc. dissertation, University of Khartoum, 1980, p. 121.

farmer's crop will be sold to the lender. Loans extended are characterised by their short duration which ranged between a month, to slightly less than seven months, or even one year.

Despite the higher interest rates and the potential for exploitation, many rural farmers prefer to borrow from informal lenders. Some of the reasons for this preference pattern are in the words of the farmers:

- (a) "The informal lenders do not require so much, if any, paper work".
- (b) "He does not delay payment, he just says sign this note and provides the money all in the same day".
- (c) "Even though I must pay more interest he (the informal lender) gives me more time to pay".
- (d) "Informal lenders are not as difficult to deal with, they speak the same language as the client".
- (e) "Loans from informal lenders can be obtained more quickly and with less red tape".
- (f) "The bank is a full day's trip from my farm while he (the moneylender) is just down the road".
- (g) "He (the village merchant) will also buy my crop at harvest time but the bank won't".
- (h) "The banks are just for the rich".

The application procedure for credit from commercial lenders in the informal market in Sudan and elsewhere in most LDCs is quite simple. The borrower talks directly to the lender about his financial needs. There are usually no forms to fill out, no references to submit, no land titles to present, no taxes to pay or stamps to buy. Since the lenders and borrowers know each other, the borrowers ask for credit directly without preliminaries and the lender usually accepts or rejects the request immediately.

In addition to their credit services, the *shail* merchants in the scheme provide certain social services. However, a charge ought not to be made for these social services when calculating the interest rate that would cover the *shail* merchants' costs of lending. The same applies to the *shail* merchants' marketing activities. It is not only the *shail* merchant but all members of the community who participate in social occasions and the *shail* merchants, as members of the community benefit from other people's help in emergencies and from other gifts that take the form of reciprocal credit in their happier events.

Quantification of these forms of assistance, is socially unacceptable. The poor farmers, whose farm income is not sufficient to cover their needs, supplement such income by their off farm earnings and particularly by receiving social transfers. Transfers are made by members of the family working in town or having permanent jobs and such members are socially obliged to help their parents and other members of their extended family who need help. The very poor tenant farmers also benefit from donations associated with religious obligations like *zakat*.

9.7.2. Disadvantages of Informal Lending in Agriculture

It has been suggested by many development bankers that one of the main disadvantages of informal lending is that once credit is granted there is no further contact between the informal lender and borrower until the time of repayment. This can also be the case with the formal lending by the ABS. What the borrower does with the funds or goods is of no concern to the lender, so there is an absence of supervision. This was confirmed during the field work. To support this argument, there are many cases of misuse of the credit facilities given by the Bank in some areas, but it is rather difficult to obtain accurate data. This misuse of credit facilities creates many repayment problems for the Bank (it is also one of the shortcomings of traditional financing) due to the lack of supervision and an adequate monitoring system¹¹.

The *shail* merchants, as an informal credit market, use their monopolistic power

¹¹ Rehiman, A. A., Op.cit. p. 217.

to put more barriers for other financiers in the field. Competition from outside the village is ruled out because of the very many barriers to entry. Such obstacles include tradition, trading relations, family ties, indebtedness and lack of knowledge by outsiders, of the villagers. For these reasons, neither the *shail* merchants nor the villagers would be ready to provide the outsider with such information. A similar case has been noted in Malaysia where the Chinese community form the main middlemen moneylenders. The main obstacles to entry by the local members of the village include lack of skill and managerial ability in addition to borrowers' debt. But some of the villagers, particularly woman, did enter the market on a very limited scale. However, the funds available to women are small and represent only their few ornaments. They sell these to jewellers at the beginning of the *shail* season and use the money received to raise their living standard and purchase new ornaments.

Since the relationship between the lender and borrower is based on exploitation through the predominantly higher interest rates charged by lenders, there is no explicit development goal which necessarily favours the economic improvement of the client. In most cases the informal lender might actually risk promoting the decline of his client so that he could acquire real assets, or accumulate labour services and other personal contributions. In contrast, government lending institutions like the ABS have no reason for any such negative intentions; indeed, the economic improvement of the farmer in general (though the preference is always towards the large farmer) is the rationale for the establishment of this institution.

During interviews with many of the farmers it was discovered that when the farmer is indebted to the merchant for two or more seasons, this will result in him falling under the merchant's control. First of all he cannot have access to further credit through *shail* from other merchants, since whatever he produces will be taken by the original merchant creditor. Thus, in effect, the farmer is tied to only one merchant dictating his own conditions over farm production. Under such circumstances of indebtedness, the merchant continues to supply consumer commodities

at prices higher than the market price, allowing debts to accumulate further¹². Through these means the farmer's dependence on the merchant is strengthened. So the farmer is forced to sell his product at low prices and the debt accumulates leading to a cycle of indebtedness and increasing the control of the *shail* merchant over the small farmer.

9.8. Agricultural Credit

The farmers were asked if they had opened a deposit account with a bank. 48% of the farmers indicated that they had a deposit account with a bank whereas 52% of them did not. This is indicative of the fact that the present formal financial system in Sudan is new and has arisen through a process of evolution, a most notable feature of which was the establishment of the Bank of Sudan in 1960. Before that, in 1930, informal credit was the only source of farm credit known in Sudan and informal rural financial markets still remain dominant in the provision of credit and other services for agricultural activities.

The farmers were given four possible reasons to explain their decision to open an account with the bank. 32% of the farmers stated that savings are safer in the bank whereas 68% of them did not reply either because they had not opened an account with the bank for financial or religious reasons, or had other reasons in doing so.

Only 2% of the farmers responded that they had opened an account because they get a return on savings in the bank. The farmers who had opened an account in the belief that the Bank offers a loan to account holders formed 8% of the total.

This fact will support the argument that there is very little confidence in the institution among the farmers. Confidence is the basis of any financial transaction. This is more so in the case of rural people, who are cautious in letting others have their money. Safety, continuity, and secrecy are some of the factors that foster confidence.

¹² Awad, M. H., 'Dilemmas in Economic Independence Lesson from Sudan', in *Economic Independence in Africa*, Ghai, D. (ed), East Africa Literature Bureau, Nairobi, 1973, p. 50.

The answers analysed above have raised certain doubts regarding the Bank's role as a formal development financial institution in the country as its contribution is almost negligible. It was also found that its role in mobilising the resources of the farmers is insignificant. The accessibility to the financial institution is an important factor in the promotion of savings. When bank branches are opened near market centres and operate at convenient hours, rural people opt to institutionalize their surpluses. When they are confident as to its liquidity, they would prefer to earn something on the surplus rather keeping it idle. Provision of financial services, like money transfers from one centre to another, can encourage depositors. Similarly, non-financial services like payment for the purchase of crops, payment of bills, etc., can increase deposits. When there is a linkage between savings and lending, rural households will be prompted to hold deposits with a view to availing themselves of loans when needed.

9.9. The Relation of the Farmer with Financial Institutions

The farmers were asked if they have dealt with banks before. 56% of them indicated that they had not dealt with a bank, whereas 44% of the farmers had done so. This result indicates the fact that the Bank's dealing with the farmers is weak and that it has failed to mobilize resources in the rural areas.

As we mentioned above the majority of the farmers (56%) have clearly pointed out that they had not dealt with a bank before. Moreover, 10% of the farmers started in 1960 and 6% of them have approached the bank between 1970-1974. The remaining (28%) of farmers started dealing with the bank after 1975. These facts prove that the Bank's penetration in the area is weak, whereas, the *shail* system would appear to continue to be powerful for many years to come. The general feeling among the farmers is that they would prefer to deal with the *shail* system rather than the bank, at least because of straightforward and simple procedure of dealing with informal money markets.

The farmers relation with the bank is weak in the rural areas of Sudan and based on this fact 82% of them did not approach more than one bank, in comparison to

the small fraction (who make up 18%) who have done so.

The farmers were asked to identify from amongst the following institutions the one they had dealt with:

- (a) The Agricultural Bank.
- (b) A government credit agency.
- (c) An Islamic bank.
- (d) Others.

(a) The Agricultural Bank:

A small number of farmers (18%) have dealt with the Bank, whereas the majority (82%) have not. This supports the earlier point that the role of the Bank is insignificant in the rural areas.

(b) A government credit agency:

The data has revealed that the role of the other development or commercial credit institutions in the rural areas of the country is almost non-existent although the potential in agriculture is still greater than in other sectors of the economy. However, these government credit agencies appear to continue in the belief that investment in agriculture is a risky venture and should be avoided by concentrating their investment exclusively in urban areas.

(c) An Islamic Bank:

The data indicated as well that the role of Islamic banks in the rural areas is very limited as only 4% of those surveyed had dealt with them. This will however, put more pressure on the management of these institutions to invest in the agricultural sector through *musharakah* financing in order to assist the farmer in their development efforts. The remaining 96% of the farmers stated that they had not heard about Islamic bank financing. This is one of the weaknesses in the new system and a great deal of publicity is required. Unfortunately, Islamic banks in the recent past have dealt only with the people in the urban areas and neglected the rural

areas completely. However, to break these barriers, the Sudanese Islamic Bank has recently started to penetrate the rural areas through *musharakah* financing which is considered to be a good sign of a move in the right direction but such contribution is far beyond the expectation of those poor farmers and a considerable amount of work needs to be done in this area.

9.9.1. Problems Facing the Farmers

Unfortunately, the data has revealed that the majority of the farmers, i.e. 94% of the total feel that the bank did not help in marketing and storing their crops, whereas only 6% state that the bank did help them. In general storing and marketing are vital for the farmer and the Bank's role here can be considered unsatisfactory.

However, the marketing of agricultural products in Sudan presents a host of problems. Since most of the farmers have small and often fragmented holdings and their farm production is characterised by their heavy dependence on the cultivation of vegetables and fruit crops, the extent of marketable surpluses of these commodities depends largely on the immediate needs of the farming community.

Since most farmers have hardly any stand-by capacity, owing to the lack of credit and storage facilities, the bargaining position of the farmers vis-a-vis the intermediaries is further weakened by the inadequate transport and communication facilities. Thus this reflects in general the weaknesses of the marketing system in Sudan. The important point is that the Bank should play a more active role in providing finance for storing and transport facilities to the farmers within the scheme.

The farmers were asked to give their opinion about facilities provided by the Bank. Three major problem areas were identified:

- (a) Irrigation problems.
- (b) Marketing problems.
- (c) Storage problems.

(a) Irrigation problems:

The Bank's role in providing irrigation facilities to the farmers is relatively satisfactory. According to the data collected within the scheme 46% of the total number of farmers were satisfied. However, 54% of those interviewed thought that irrigation was still a problem that had to be resolved by the Bank.

Many of the valuable crops like vegetables and fruits require supplementary irrigation if they are to be marketed successfully. A lack of irrigation equipment is a limiting factor. During the fieldwork it was noticed that most of the pumps were old and spare parts were not easily available.

(b) Marketing problems:

Marketing is considered to be the major problem that faces the farmers in the field. 36% of them stated that the Bank has helped them in marketing their crops whereas 64% of them indicated that the Bank did not help them. In addition, due to shortages or a lack of transportation, storage and institutional credit facilities, farmers usually have to dispose of their products, as soon as they are harvested, and sell to middlemen.

The marketing of vegetables is either performed by the producer or a commission agent on behalf of the producer. A small proportion of vegetables is marketed locally by either the farmer and/or his children or through other vegetable sellers in the village. Both dispose of the crop in their own villages, and in neighbouring villages. The bulk of the vegetables is transported to the urban centres such as Medani and Khartoum.

Mangoes and citrus fruit (which are produced by the rich farmers) are mainly taken to distant urban markets such as Khartoum. The most common marketing channel is that between farmer and local trader when the farmer sells all the orchard's produce to the latter just before harvest. The price is determined by direct negotiation. The buyer has to harvest the produce himself, usually during a specified time period which is agreed to by both parties when negotiating the deal. It is in the interest of the seller to harvest the crop before the trees flower for the new

season as this would prevent damaging the flowers. However the buyer usually tries to schedule the harvesting operation according to supply and demand conditions in the market. After harvest the trader sends the produce, using his own truck or one rented for this purpose, to a fruit wholesaler at Khartoum whom he considers a regular customer. The merchant in Khartoum determines the value of the consignment according to prevailing market prices at the time of receipt and remits the money to the local trader. Therefore, the government should be encouraged to take a strong initiative to regulate the markets, whereby not only the practices in the market could be rationalised according to certain rules, but better market information could also be provided to all the parties involved.

(c) Storage problem:

78% of the farmers stated that storage is another major problem which they are facing in the scheme whereas 22% indicated that the Bank has provided them with storage facilities and this is therefore not considered to be a problem. The storage facilities which most farmers have are often poor and inadequate, and until there is a large quantity of produce the cultivators do not consider it worthwhile to store it. The storage of foodgrains is thus the only common practice at farm level; the other products (both perishable and non-perishable) are sold immediately at the door-step or carried to the nearest market.

9.10. Type of Bank's Credit and Facilities

The farmers were asked about the kind of incentives the Bank provides. Three specific types were identified:

(a) Purchases of agricultural inputs:

Over 74% of the farmers have stated that the Bank has assisted them in providing agricultural inputs such as seeds and fertilizer to be used in their farms. However, it has to be noted that the FAO fertilizer programme in the Sudan is very effective in helping the Bank as well as the Ministry of Agricultural and Irrigation to eliminate certain obstacles in the way of wide and efficient use of fertilizer by the farmers.

Some of the main objectives of FAO programme are as follows¹³:

- (1) to conduct a large number of fertilizer demonstrations of farming fields;
- (2) to establish, where no research recommendation are available, simple trials to determine the most efficient fertilizer rates;
- (3) to improve and strengthen existing marketing channels for fertilizers;
- (4) to improve and strengthen, in cooperation with the Agricultural Bank, the existing credit facilities for large numbers of small farmers by executing pilot fertilizer schemes.

(b) Marketing the crops:

The farmers have also pointed out that the Bank did not provide them with any incentives for a better marketing of their crops. The Bank's role in this area is thus almost non-existent and, the credit available for marketing purposes, accounts for only 2% of the total credits extended. To overcome this problem, the farmers have adopted a number of methods by which they can sell their product. Immediately after harvest the crops are put into bags and transported by lorry from the fields to the town. In the case of vegetables and fruits the crop is sold immediately.

If the farmers are pressed for cash and have to sell their produce immediately after harvest they normally take it to the central market where it is sold to the major merchants. Each farmer delivers his produce to a certain lot in the market. The Bank's involvement in marketing of the farm produce is crucial. Without marketing systems there is a limited market restricted to that which can consume products within a short time and at a short distance from where it is produced. Consequently the farmer may be underpaid and lose any incentive to produce the same product.

(c) Storing the crops:

The same can be applied to storing of the crop. The Bank's role in providing credits for storage, as an incentive to the farmers is almost non-existent and the

¹³ Food and Agriculture Organization (FAO), *Fertilizer Programme in the Sudan*, Khartoum, June 1983, pp. 1-2 .

amounts account for only 2% of the total credits made available. If the Bank provides storage facilities to the farmers at village level, or in the nearest small rural towns, this will act as an incentive to the farmers concerned. Otherwise, the farmers will continue to be vulnerable and more interested in looking for work outside the agricultural sector.

Table 9.6. reveals some interesting results. As many as 74% of the farmers have not dealt with the Bank either because its credit terms and conditions are not attractive or because the farmers concerned think that dealing with the *shail* system is more simple and straightforward. 26% of them indicated that they have received credit from the Bank for no more than a period of one year. This is indicative of the fact that the Bank's credit is available to farmers in the form of short-term loans for one season or at most for one to two years. Short-term loans are used to finance the purchase of such farm inputs as seeds, fertilizers and pesticides to plant the seed. Longer term loans are given for the purchase of such longer lasting inputs as irrigation motors and pumps, tractors and other farm implements. But the bulk of the credit goes to provide short-term loans for poorer farmers.

Table. 9.6.
CREDIT TERMS EXTENDED BY THE BANK

Credit Term	Percentage
None	70.0
Under Six months	2.0
Six months-one year	2.0
Over one year	26.0
TOTAL	100.0

Source: Survey Finding

The farmers were asked if they required more credit facilities. Almost 90% of them responded positively. This implies that the demand for credit is very high but on the other hand the role of the Bank is insignificant. In rural areas the farmers are always in need of capital to increase their farm production. The Bank can extend credit to the farmers also in order to alleviate the monopoly enjoyed by the *shail* merchant which forces the interest rates to excessively high levels, often beyond what an average farmer and his family can afford.

The farmers were given four possible reasons to justify their need for more credit. These were,

- (a) to introduce new crops.
- (b) to undertake farm improvements (e.g. new irrigation work)
- (c) for family reasons.
- (d) to pay off previous debt.

For the first option, it seems that the farmers are so far satisfied with their agricultural practices and only 12% of them are interested in introducing new crops in their farm. This supports the argument that the farmers are very conservative even when the introduction of new varieties would ultimately increase the agricultural productivity on the farm.

For the second option, the majority of the farmers, 86% responded positively. In fact their main requirement is water pumps used to raise irrigation water from the rivers, as well as pumps used for sprinkler irrigation.

None of the farmers chose the third or fourth possibility. This indicates that the farmers did not mix their family set of priorities (such as to pay off previous debt) with their farm priorities. If they receive a loan without any conditions on its utilisation they will spend the money, most likely, on their scheme priorities which in this case is farm improvement in new irrigation equipment. This is a promising sign for banks to make available more credit without undue fears about the farmers misallocating these loans.

The farmers were asked whether the existing marketing facilities were satisfactory. The majority of the farmers (82%) responded negatively whereas 18% of them indicated that the marketing facilities were satisfactory. This is understandable in view of the fact that most of their products (like fruits and vegetables) are highly perishable commodities. Their quality begins to deteriorate from the moment of harvest and continues throughout the marketing process. There is an urgency to process and market these products as quickly as possible to maintain their farm-fresh value. The Bank can provide new marketing facilities and enhance the existing ones.

Due to the lack of marketing facilities and owing to the pressing need for cash, a large number of the farmers have little option but to sell all, or a sizable part of their crop immediately after harvest, at which time prices are usually at their all-year lowest level.

The farmers were asked if there are any advantages in receiving Agricultural Bank of Sudan credit facilities. 62% of the farmers responded negatively whereas 38% of them replied positively. Apparently most farmers see no advantage in receiving credit from the Bank. They have been prevented from using the Bank's facilities due to its own procedural complications. Therefore, the role of the Bank in the rural area is very limited as mentioned earlier. Meanwhile, the Bank prefers to deal with the rich farmers rather than the poor farmers because they are considered creditworthy and can provide the Bank with security against any loans provided to them.

The farmers were given the following three possible reasons to justify making use of the Bank's credit facilities. These were:

- (a) cheaper than loans;
- (b) no collateral needed;
- (c) sharing of risk.

Almost all the farmers who thought it advantageous to receive a credit from the

Bank (34%) argued that these were cheaper than loans from the *shail* merchant.

The farmers were also asked if there were any disadvantages in receiving the Agricultural Bank of Sudan credit facilities and were offered three possible reasons. Specifically the disadvantages were identified as being due to:

- (a) more expensive than loans;
- (b) procedure complicated to understand;
- (c) payment by installment.

Most of the farmers prefer to deal with *shail* system rather than the bank because of its simplicity. Only 2% of farmers responded by indicating that the Bank's loans are more expensive as compared to those from the *shail* merchant. The same proportion (2%) agreed with the statements about the procedure being complicated and the payment being in instalments.

9.10.1. Comments by Farmers

Finally the farmers were invited to add any further comments about any problems they faced. From the data collected the following problems come to the fore:

- (1) lack of agricultural inputs;
- (2) inadequate agricultural implements;
- (3) loan procedures complicated to understand;
- (4) agricultural extension;
- (5) irrigation;
- (6) setting up of a canning factory for tomatoes;
- (7) financing is not sufficient;
- (8) marketing.

In our discussion we concentrate on the first two major problems (dominant in the mind of the farmer) facing the farmer, namely the unavailability of agricultural

inputs (like seed, fertilizer and pesticides) and inadequate agricultural implements.

(1) Lack of Agricultural Inputs

The majority of the farmers (80%) revealed that the Bank did not provide them with the agricultural inputs (like fertilizer and pesticides). Undoubtedly, the role of fertilizers in increasing crop yield has increased over the years and now tops the list of agricultural inputs.

All crops continually remove from the soil the nutrients which are essential to their healthy growth. The most important elements of plant growth in the soil are nitrogen, phosphorous and potassium. In order to maintain soil fertility, and so provide a sound basis for continued plant growth, these nutrients must be replaced in the soil. Thus, unless the plant nutrient balance in the soil is adequate for the optimum growth of crops, other factors conducive to increasing agricultural production, such as better seeds, water and improved land preparation, can hardly be of any avail in bringing about the desired results. Therefore, organic manures and artificial fertilizers may be regarded as prime factors for better crop production.

While there is an obvious need to increase the consumption of fertilizers in the schemes and the positive response of the farmers towards fertilizers in recent years has been very encouraging, there are several problems which face the farmers and the Bank. There are three major factors which influence the use of fertilizers by the farmers, namely: (a) cost consideration and credit facilities, (b) the distribution of fertilizers, (c) the lack of adequate knowledge of the amount of each fertilizer, or a combination of more than one, needed for a particular crop and the methods of application.

From the Bank's point of view, the problems include: the expansion of extension services for practical demonstrations of the application of fertilizers, and the production and distribution of cheap and most appropriate fertilizers. It is important to note that, the positive response of the farmers, has led the government through the banks, to subsidise the sale of fertilizers to the extent of 50% of the total cost.

The farmers have also pointed out that the Bank did not provide them with

pesticides. It was observed that in some cases the farmers lost their crops due to the damage caused by various plant diseases and pests. What is even more distressing is that the incidence of plant diseases is not restricted to the crops when they are standing in the field, but that many of these are carried through the seasons or even damage the stored grains.

Most farmers have neither the knowledge to detect the disease organisms and the damage caused by them, nor do they possess adequate means to prevent and combat them. Some of the diseases are transferred to the soil immediately after the sowing of infected seeds; the farmers hardly ever treat them. During the various stages of plant growth, the attack of insects and micro-organisms further aggravates the healthy growth of the crops. Thus, at harvest time, the farmers have to be content with whatever produce is left from these enemies¹⁴.

In such circumstances, the need for an effort, on part of the Bank, to save the crops cannot be over-emphasised. Thus, at the behest of the government, plant protection measures have been more widely applied in recent years in order to overcome this formidable problem.

It need hardly be emphasised that in countries where crop production has attained a high level, it is largely due to the use of good quality seed, manures and above all artificial fertilizers. The use of improved crop seeds means essentially the use of superior varieties of crops, especially well-adapted to particular soil and climate conditions.

(2) Inadequate Agricultural Implements

50% of the farmers stressed that the second major problem they face was the inadequate use of appropriate farm implements for various farm operations and the wasteful methods of crop cultivation. The techniques of cultivation when defined, include the preparation of land for seed, sowing and the harvesting of crops.

Proper preparatory treatment of land is an essential factor in crop production, and

¹⁴ Khan, M. H., *The Role of Agriculture in Economic Development, A Case Study for Pakistan*, Centre for Agricultural Publications and Documentation, Wageningen, 1966, pp. 103-113.

improved tillage assumes increased importance if new varieties of crops, improved soil fertility treatment and water management are to produce the maximum effect on the yields of crops. Timely ploughing and sowing are the two basic factors conducive to good yields; late sowing reduces the yield of all crops. While every cultivator in the scheme is aware of the rationale of these elements, he is very often handicapped in carrying them out in time due to inadequate equipment with the required power and accessories.

In Sudan, almost all draft power on the farm is either derived from animals, or dependent upon the manual labour of the farmers themselves. The success or failure of a crop may thus often depend upon the plough, the way it is operated and the power with which it is pulled.

In the rural areas the problem has become very acute and it has forced the rich farmer to compensate for the shortages by using a machine to do the work of a number of men more efficiently and in shorter time. Many agricultural operations have usually to be done in a short time and if weather conditions do not permit, then use of machinery enables these operations to be completed within a suitable time.

The type of mechanized tools required by the farmers are not complex such as tools for land preparation operations. Land preparation requires mobile power sources such as animals, tractors or power tillers (hand tractors). Of all land preparation operations, primary tillage (the breaking of the soils, often combined with the turning of the top layer), is the most power-intensive operation. In the move from hand labour to animals, and later in the move to steam and to tractors, primary tillage is usually the first land preparation operation to use the new power source.

The farmers also argued that mechanized tools are needed for seeding and planting. These are among the few agricultural operations where animal and tractor-drawn machines appear to be capable of greater precision than hand methods. Mechanical means thus may lead to modest direct yield effects. Line sowing is more precise than hand spreading, making inter-row cultivation and hand tools, animals,

or tractors easier to work with and saving on seed. Mechanical seed and fertilizer placement may thus be attractive in intensive cultivation systems.

But the question to be asked is whether it is desirable to introduce more mechanization in the scheme and what the difficulties are?

It is only possible to look at a small number of implications of mechanization of the three main activities of water management, cultivation and harvesting. In order to discuss the problem further it is helpful again to simplify the position by generalizing and arguing that most management of water and preparation of the land for crops is undertaken by hired labour. Harvesting, however, is the period of maximum labour demand, and it is during these periods that hired labour is able to work and earn a supply of food for the coming months. There are, therefore, important differences between the economic and social side-effects of the mechanization of irrigation, cultivation and harvesting. It can be argued that while there is an obvious case for mechanization of water management and cultivation, the mechanization of harvesting must be approached with caution. The existing structure of society and the method of remunerating the poorest element of the rural community makes the mechanization of harvesting both an economically and a socially disruptive process, because such mechanization would jeopardize the employment of this poor labour section of society.

However, if an efficient mechanization is to be performed within the scheme then the present irrigation lay-out has to be modified by introducing long furrow irrigation systems. For example, under long furrows more land levelling and well shaped furrows are essential. Thus mechanization requires a complete review of the present practice of seed bed preparation and irrigation layout.

9.11. Conclusions

Agriculture in Sudan is in a stage of crisis and credit can be a powerful instrument in bringing about changes in agricultural practices and in farm productivity. The small farmers' experience with the Agricultural Bank of Sudan shows that the Bank's role is limited in the rural areas and the growing demand for credit cannot

be met by the institution alone due to its inadequate financial resources. According to the survey the farmers require more credit for the purchase of non-traditional farm inputs such as fertilizers, insecticides, improved seed varieties and implements of cultivation and processing such as tractors.

The farmers interviewed during the field work pointed out that when they get a loan from the Bank, they must provide the Bank with adequate collateral security against any default. Moreover, the Bank has strict rules in its policy and procedure for the repaying of the loan. According to one of these rules, "a penal interest must be charged on all delinquent loans. But if due to a major agricultural disaster, natural phenomena, bad weather, pests, diseases, or for any other reason a borrower becomes unable to meet his loan obligations, this must be immediately established to the satisfaction of the Inspector of Agriculture and application for revision of repayment must be prepared before the next instalment becomes due". Such strict rules by themselves clearly explain why the small farmer prefers to deal with the informal sector through the *shail* system.

There is no doubt that the operation of the two credit sources have retarded agricultural development: the scheme by confining its activities to certain crops, and the informal sources by exploiting the farmer and absorbing the majority of his remaining marketable surplus through charging exorbitant rates of interest. In addition to the rigid structure of the scheme, the operations of both credit sources have reduced the farmers' interest in farming and deprived them of incentives to adopt proven innovations.

With the attractive opportunities available, government policy should be directed towards establishing institutional terms which would encourage the provision of capital required for the adoption of these opportunities. It should satisfy the effective demand for credit by facilitating capital transactions and encouraging capital movement.

The most appropriate channel to provide the small farmers with the necessary credit for development and to assure repayment of institutional fund has preoccu-

pied the government of less developed countries and other regional and international organisations since the early 1950s. As far as the new institutional channels including the Agricultural Bank of Sudan and the co-operative societies are concerned, it must be said that their performance is very disappointing. Moreover, excessive centralization of these institutions has often resulted in an inability to adjust programmes to local conditions and in an increase in the cost of administration. With these drawbacks, most of the institutional credit sources tended to favour the most wealthy farmers, although their original purpose was often directed more towards the small farmers. This has led to the development of a private rural credit market dominated by the *shail* merchants.

To overcome the problem of excessive centralization and to promote the integration of the credit markets in the agricultural sector, many of the less developed countries have looked to the establishment of co-operative societies. Conceptually, co-operatives for final credit delivery represent a form of organization which embodies decentralization of control and decision-making and incorporates local knowledge and responsibilities. Group responsibility for repayment reduces default while such a grouping raises the size of loans and thus reduces administrative cost. Unfortunately, this idealistic picture of co-operative societies has proved to be unworkable in most of the less developed countries.

The effective use of credit as a lever in raising agricultural output in rural areas in Sudan requires a broadly conceived, well informed, close follow-up and monitoring system and carefully executed lending policy.

Our research finding has shown that the role of the Agricultural Bank of Sudan in rural development is indeed very weak and the Bank should find ways and means of modifying its credit policy. This requires that the Bank pay greater attention to the needs of the small farmers in the rural areas. The extension services are very vital in the rural areas since a large number of the farmers are illiterate and need more attention and demonstration of how, for example, they can use fertilizer in order to increase their productivity. Therefore, incentives should be provided to the extension workers in order to keep them in the rural areas. They could act

as advisory agents for the Bank aimed at increasing the credit utilization by the farmers¹⁵.

The Bank should introduce the concept of *musharakah* financing in agriculture in which the small farmers would be a partner (in the project with the Bank) rather than a wage earner. If such an attempt was made the farmer will become aware that he is in partnership with the bank. This will encourage him to avoid dealing with the *shail* system. The bank, however, will succeed, relatively speaking, in narrowing the gap between the informal and formal sector.

The Bank should also improve the marketing and storing facilities for the farmers since most of their produce is perishable. A modification in the lending policy of the Bank is necessary. A higher allocation of its budget may be earmarked to medium and long-term credit which will enable the farmer to increase land productivity and improve his living conditions. It would alleviate the problem of poverty in the rural areas of Sudan.

¹⁵ *Integrated Agricultural Credit with other Agricultural Services*, Paper presented to the National Session on Adminstrating Agricultural Credit, Khartoum, December 1987, p. 2.

CHAPTER TEN

THE SUDANESE ISLAMIC BANK: ITS ROLE AND IMPORTANCE IN RURAL DEVELOPMENT

Introduction

The agricultural sector constitutes the greatest percentage of the total value added in Sudan. Small farmers in this country are in a poor state. They suffer liquidity problems which greatly reduce the efficiency of their farms. They have no access to organized credit markets and the usual source of borrowing is the *shail* merchant who charges exorbitant interest rates.

In the early seventies, experiments in Islamic banking were initiated and Sudan has played a major role in its promotion. In 1977 the Faisal Islamic Bank of Sudan was established. The early success of this first Islamic bank led to a proliferation of Islamic banks in the country. At present, interest-based banking is prohibited, and all banks in the country operate on the basis of Islamic financing. In the Sudan, as elsewhere, the main financing instruments adopted by the Islamic banks are *murabaha*, *mudarabah* and *musharakah*.

In the last two decades the practice of the majority of Islamic banks in Sudan and elsewhere suggests a widespread preference for *murabaha*, and to a lesser degree *mudarabah*, financing on the part of development bankers. In contrast, *musharakah* financing generally has been avoided on the assumption that it is an economically non-viable (high risk) instrument. But the experience of the Sudanese Islamic Bank not only disproves that assumption, but also corroborates the relevance of *musharakah* as a tool for rural development among the poorer sections of the population. This chapter considers aspects of the *musharakah* operations of the Bank, with special reference to its application in agricultural financing for small farmers.

The purpose of this chapter is to examine the role and importance of the Sudanese Islamic Bank (SIB) in rural development in the Sudan. The chapter is divided into ten sections. The first will assess the concept of rural development

and the second its objectives, including an examination of its short and medium term goals. The third deals with the establishment of SIB while the fourth deals with the Bank's concept of rural development and its strategy. The fifth highlights the Bank's philosophy in financial transactions. In the sixth *musharakah* models are identified and a subsection focusses on the Bank's agricultural financing model and its family poultry production scheme. In the seventh section we analyse the balance sheet, development and profit and loss accounts. The Bank's investment is examined in the eighth section. The ninth focusses on its operations, a subsection discusses *musharakah* in trade and industrial investment. Finally, some conclusions will be drawn on the role of the Bank in rural development.

10.1. Concept of Rural Development

Rural development is a complex subject and has been defined as a process by which the rural population of a nation improves its level of living on a continuing basis¹. In this process, government efforts need to be focused primarily on involving the poor majority of the rural population. Effective rural development has five fundamental characteristics: (1) rising level of output and living standards, (2) a degree of organized, disciplined participation by the rural poor in planning, implementation and evaluation, (3) A national policy focus on the small, labour-intensive producer as the economic engine of development, (4) Systematic provision of improved technology plus appropriate physical infrastructure and (5) Organized links between farms, villages, market towns, and provincial centres.

The above fundamental characteristics of rural development raise many questions as to how it works, the shape it takes, and how it is determined and influenced by the many factors in rural areas of the country. Factors such as the stage of economic development of the country, the humanitarian attitudes of its people; the sincerity, skill, wisdom and all-round knowledge of its planners, administrators, and implementors at all levels; the relevant educational institutions; the extent to which its citizens are informed, consulted and encouraged to participate; and other fac-

¹ Butterfield, S. H., 'Rural Development: Why it is Hard for Developing Country Leadership to Get Started', *International Development Review*, Vol. XIX, part I, 1977, pp. 8-12.

tors of varying importance at the local, village, area, regional and national levels, all affect its direction, its magnitude, its success and failure.

During the last decades of international and national rural development efforts at different stages a significant amount of data, information, knowledge, documentation and experience has been accumulated. Also enough studies have been done, sufficient experience gained and observations made to validate certain assumptions and to provide insight into the basic and fundamental requirements for successful planning, operation and functioning of rural development programmes. Yet many questions raised during these decades of rural development work remain unanswered and we will summarize some of them:

(1) How to improve the living conditions of the rural poor who live in various stages of relative poverty?

(2) How to provide rural poor with employment opportunities and the infrastructure for the farmers to accept and carry out practices which increase agricultural productivity?

(3) How to encourage the development of socially and economically viable, rural-urban communities which offer alternatives to the migration of rural poor into cities for employment and social services?

(4) Provision of a structural framework for rural people to be fully involved in contributing to their own development, and channel technical help and financial resources to rural people to serve their needs and increase their capacity to use such resources².

10.2. Objectives of Rural Development

The main objectives of rural development are necessarily dictated by the salient features of the rural economy of the society concerned. Long term development objectives are usually related to national values and aspirations of national government. These are usually broad, general and relatively few in number. More

² Poostchi, R., *Rural Development and Development Countries*, The Alger Press Ltd, Canada, 1986, p. 1.

specific short-run instrumental objectives are validated by the primary objectives to which they relate: increase in per capita output and income; modernization of agriculture and industrialization; health and nutrition; education and welfare and more equitable distribution of national wealth. We will concentrate our analysis on the short and medium-term objectives as these are much more well defined, as it would be premature to discuss the long-term objectives of rural development due to the current economic and financial situation in Sudan.

10.2.1. Short and Medium-term Objectives

Short and medium-term objectives may be taken to cover five-year periods, that is the duration of a five-year development plan. During such a period, an attempt might be made to achieve three main goals³:

First goal:

An increased per capita income for the economically active population, and hence for the entire population. This aim is justified by the fact that there is a wide gap between the income of workers in the rural sector, particularly in agriculture, and the income of workers in other sectors. The income differential between these groups is apt to foster frustration among certain social classes vis-a-vis other citizens in the same country. This constitutes a major reason for the rural exodus of youth to the urban centres.

Increased income for the rural farmer requires an increase in his productivity as well as guaranteed stable prices. The improved productivity of the farmer will demand technological progress and hence give a better yield for the production factors. As regards price stabilization, it can come from a rational storage and marketing policy conducted at both local and national levels.

On the other hand, increased wages for the rural farmer may come either from an increase in his output or from higher prices, or the combined effect of both.

³ Abdel-Khalik, A. R. Z., *The Production and Distribution of Milk and Dairy Productions in Egypt. Towards a Co-operative System*, Department of Business Administration, University of Stockholm, 1981, pp. 7-15.

A wage policy based on high prices is not realistic, for it brings about inflation within the country, which may have the effect of decreasing the actual purchasing power of any additional income. Furthermore, such a policy may reduce export opportunities and make products less competitive. Conversely, a drop in prices may have an adverse effect on production. It may tend to cancel out the profits expected as a result of the efforts made to increase the volume of production.

Second goal:

To reduce the rural exodus and underemployment in the countryside. African agriculture is stagnant and the continent threatened with hunger because, among other reasons, the economically active population actually engaged in farming is finding it increasingly difficult to support their families on meagre incomes. A consequence is the population explosion in the the major towns. In Sudan, especially Khartoum, this influx has caused several and severe social problems. The problem of vagrancy indicates the scale of change and the gravity of the situation in the migrant-receiving centres⁴. In fact these settlements hindered the implementation of the housing plans and their destruction led recently to riots in which a number of lives were lost. Further the increasing numbers put severe pressures on the already minuscule health services as hospitals started to serve a population far beyond their planned capacity.

Third goal:

To increase exports and reduce imports, thereby augmenting the availability of foreign currency. Most African countries are in urgent and increasing need of foreign currency for buying equipment and, in some cases, for the import of foodstuffs that they cannot produce in the immediate future. For some of these countries, the problem of the balance of trade and the balance of payments is becoming increasingly acute. Increased export of agricultural forestry and fishery produce usually offers an immediate solution to these problems.

⁴ Abdel Ati, H. A., 'The Process of Famine: Causes and Consequences in Sudan', *Development and Change*, Vol. 19, No. 2, April 1988, p. 292.

This chapter will deal with the small farmer (rural poor) as a single target group for rural development efforts to see how far they have benefitted from *musharakah* financing introduced by the Sudanese Islamic Bank.

In spite of all the agricultural potential in Sudan only a small percentage of the land utilized in the irrigated and mechanized rainfed sectors received some attention from the government. The traditional agriculture sector (which is the heart of any economic development in the country), where about 75% of the population are involved, has received little or no attention from the authorities. The small farmers need only inputs and some running expenses. However, services of the Agricultural Bank of Sudan (ABS), which is the only government agency assigned to provide credits to the farmers, are neither adequate nor satisfactory for the small farmers. The main weakness is that the ABS does not provide comprehensive financing. It requires guarantees which small farmers cannot provide and charges a high rate of interest on loans. Since the ABS has failed to satisfy his needs the small farmer remains bound to the *shail* system where he borrows money from the merchant for agricultural inputs at the beginning of the season in return for an undertaking to sell the produce to the lender (at very low prices) on harvest.

There is no doubt that the small farm sector in the rural areas plays, and will continue to do so for many decades to come, an important role in the overall agricultural production in the country. Yet this sector, though it encompasses the poorest sector of the society, has received very little attention from both credit institutions and input supplying agencies. The basic needs of the small farmer, beside his land resources base, are inputs like parts, water pumps, land preparation equipment and tools, transport and storing, extension services and financing. To overcome the problems which face the small farmers in obtaining finance and in order to achieve economic and social justice for the welfare of the community through rural development, was one motive behind the establishment of the Sudanese Islamic Bank.

10.3. The Bank Establishment

The Sudanese Islamic Bank (SIB) is a Public Limited Company, established in 1982 with an authorised capital of US\$20 million (comprising 200,000 shares of one hundred dollars each) and it commenced its operations in May 1983.

Table 10.1.

DISTRIBUTION OF THE BANK CAPITAL IN 1407H

Shareholders in Sudan	No. of Shares	Percentage
National Capital	104,069	48.0
Eastern Region	18,525	8.5
Central Region	13,743	6.3
Northern Region	4,292	2.0
Kordofan Region	5,316	2.5
Southern Region	0,494	0.2
Sudanese Working Abroad	<u>10,197</u>	4.7
Sub-total	156,636	72.2%
Shareholders outside Sudan	<u>60,240</u>	<u>27.8%</u>
Total	<u>216,876</u>	<u>100%</u>

	No.	No. of Shares	Percentage
Promoters	410	199,296	91.9%
Other Shareholders	<u>1080</u>	<u>17,580</u>	<u>8.1%</u>
TOTAL	<u>1490</u>	<u>216,876</u>	<u>100%</u>

Source: Bank's Annual Report, July 1985

The SIB is engaged in rendering all banking, financial and trading services in addition to investments and operates in accordance with the Islamic *shariah* Laws and under supervision of the *shariah* Supervision Board in the Bank. By the end of 1407H. (1986-87), paid-up capital reached 85% of authorised capital, which is the

highest percentage for all banks in the country. The majority of shareholders (72%) are Sudanese nationals. It has fifteen operating branches in five different regions as shown in Table 10.1., and five proposed branches are under establishment.

In addition to acquisition of shares valued at £S 5,940,000 in 1406H in seven companies and banks, the SIB has established four affiliated companies. Of these two are already operating in the fields of trade and construction. The other two companies are to commence operations in the near future and will be involved in the fields of agricultural services and insurance.

Table 10.2. shows the percentage of shares subscribed to by the SIB in different companies and banks.

Table 10.2.
SUDANESES ISLAMIC BANK SHARES
SUBSCRIBED IN COMPANIES AND BANKS

Company	No of Shares subscribed	Amount paid in Sud.Pounds	% of Shares
Islamic Development Co.	300,000	304,200.00	75.0%
Al-Baraka Bank (Sudan)	120,000	195,000.00	12.5%
The North Islamic Bank	1,000	36,400.00	25.0%
The Arab Authority for Agricultural Inv. & Dev.	100	13,032.50	100%
Islamic Bank for Western Sudan	10,000	136,500.00	100%
Information and Management System Company	50	12,500.00	25.0%
TOTAL	431,150	697,632.50	—

Source: Bank's Annual Report, July 1985

10.4. Sudanese Islamic Bank: Concept of Rural Development

The Sudanese Islamic Bank (SIB) does not look at development in a pure materialistic manner, as achieving growth in the per capita income (GNP), in the context of secular theories. More than that it includes in development the question of moral values in banking transactions which should be based on fairness and justice. Its aim is a visible improvement in the behaviour of the individual and the society.

Economic and social development cannot be achieved unless attention is directed to the human being and to an improvement in his spiritual and moral instincts as well as providing him with opportunities of employment and freedom of choice.

To achieve the desired development, the Bank has focussed on small farmers and producers in Sudan's various regions. Necessary financing was made available to enable them to raise their production and improve their levels of income in order to meet their daily necessities.

This unique idea goes back to the conception of Islam that views wealth, in fact the whole universe and whatever it contains of wealth, as belonging to *Allah the Almighty*. The basis of personal ownership of wealth is that man is the vice-regent of the *Almighty* and that *Allah* will see what a man does with what he is granted. On the other hand, Islam encourages work and devises various incentives for that purpose and forbids idleness and begging⁵.

Not only does Islam advocate work, it encourages cooperation and participation between those who have the wealth and those who can exert an effort so that the whole community prospers and the economic cycle is completed in coordination and harmony.

Since such Islamic ideas necessitate a positive move, the Sudanese Islamic Bank took the initiative and invited citizens, institutions, consulting houses, research centres, universities and public entities through the public media, requesting them to present their readily studied projects for the necessary financing. Thus the

⁵ Taha, A., 'The Role of Sudanese Islamic Bank in Rural Development', *Journal of Islamic Banking*, The International Institute of Islamic Banking, Cairo, No. 54, June 1987, pp. 8-12.

Banks' efforts are in line with the efforts of the people to achieve plentifulness in production and food. The SIB had adopted this initiative in order to move and exploit unutilised capacities and their rationalisation so as to have rural development covering all parts of the Sudan.

10.4.1. Bank's Strategy in Rural Development

The main objectives of the Bank are based on the spirit and economic philosophy of Islam which is related to individual and group behaviour in utilizing available funds in addition to other resources, in such a manner, so as to achieve a society of justice and welfare.

In order to establish a balanced and comprehensive rural development programme, the Bank chose to finance small farmers basing its strategy on the following:

(1) Religious awareness and the desire of small producers for serious work if they are provided with financial resources and the means for economic and social advancement.

(2) Availability of resources, their diversity and importance in various regions.

(3) Increased demand for agricultural products to achieve food security.

(4) Improving the investment environment, solving the problems and adopting policy incentives for the sake of comprehensive national development.

The strategy of the Bank is based on financing agricultural activities and developing rural industries through small farmers and producers in accordance with the plan.

10.5. Bank's Philosophy in Financial Transactions

The Sudanese Islamic Bank bases all financial transactions on the principles of the *shariah*. The *shariah* has laid down some basic principles which guide and control any type of transaction. To be valid under Islam, any transaction should simultaneously meet three basic conditions and qualifications.

(i) Mutual agreement

(ii) Fairness

(iii) Clarity

(i) Mutual agreement

In the Islamic framework no individual is allowed to benefit at the cost of loss to others. Mutual agreement is a necessary condition for any transaction to be legitimate. *Allah* Says:

“Ye who believe eat not up your property among yourselves in vanity. But let there be amongst you traffic and trade by mutual good will”. (4:2)

To meet the condition of mutual agreement, free will, equal status and open choice are the pre-requisites. There is no natural distinction between the owner and tenant. Both have equal status before law. Neither of them is superior to the other. The landowner, no matter how powerful he may be, cannot force the tenant to submit to any excessive conditions imposed on him.

(ii) Fairness

The principle of fairness implies due shares to everyone who has a right and no individual should be harmed. As the *Prophet (Peace be upon him)* said.

“Do no harm nor take it”

To ensure fairness in mutual transactions the *shariah* established the following principles⁶.

(a) Principle of rights and obligations.

(b) No speculative transactions.

(c) No excessive conditions.

⁶ Masood, H. M., *Land Tenure System in Islamic Framework*, International Islamic University, Islamabad, Pakistan, May 1985, pp. 18-20.

(iii) Clarity

The terms and conditions of the transaction have to be specified in detail and written precisely so that there remains no confusion or doubt on either side. Islam has popularised the tradition of written agreements. The *Holy Quran* says:

“Disdain not to writing (your contract) for a further period, whether it be a small or big: It is juster in the sight of Allah, more suitable as evidence and more convenient to prevent doubts among yourself”. (281:2)

It is also desirable to make some righteous people witness to the agreement. The institution of witness is significantly important.

10.6. Musharakah Models

The new methodology of Sudanese Islamic Bank (SIB)/farmer partnership is divided into different models according to the type of production adopted. Models are:

10.6.1. Agricultural Financing Model

The Bank provides fixed assets such as tractors, ploughs, harrows, water pumps, and inputs e.g. seeds, fertilizers, pesticides, fuel, jute sacks and co-management, marketing, storing and extension. The farmer on the other hand contributes with his land, labour, part of the running expenses and management.

From the net profit the farmer gets 30% for management. The remaining profit (70%) is divided between the Bank and the farmer according to their equity share as shown in Figure (10.1).

This model is modified according to the method of irrigation e.g. canal irrigated schemes, pump and rainfed scheme:

10.6.2. Canal Irrigation

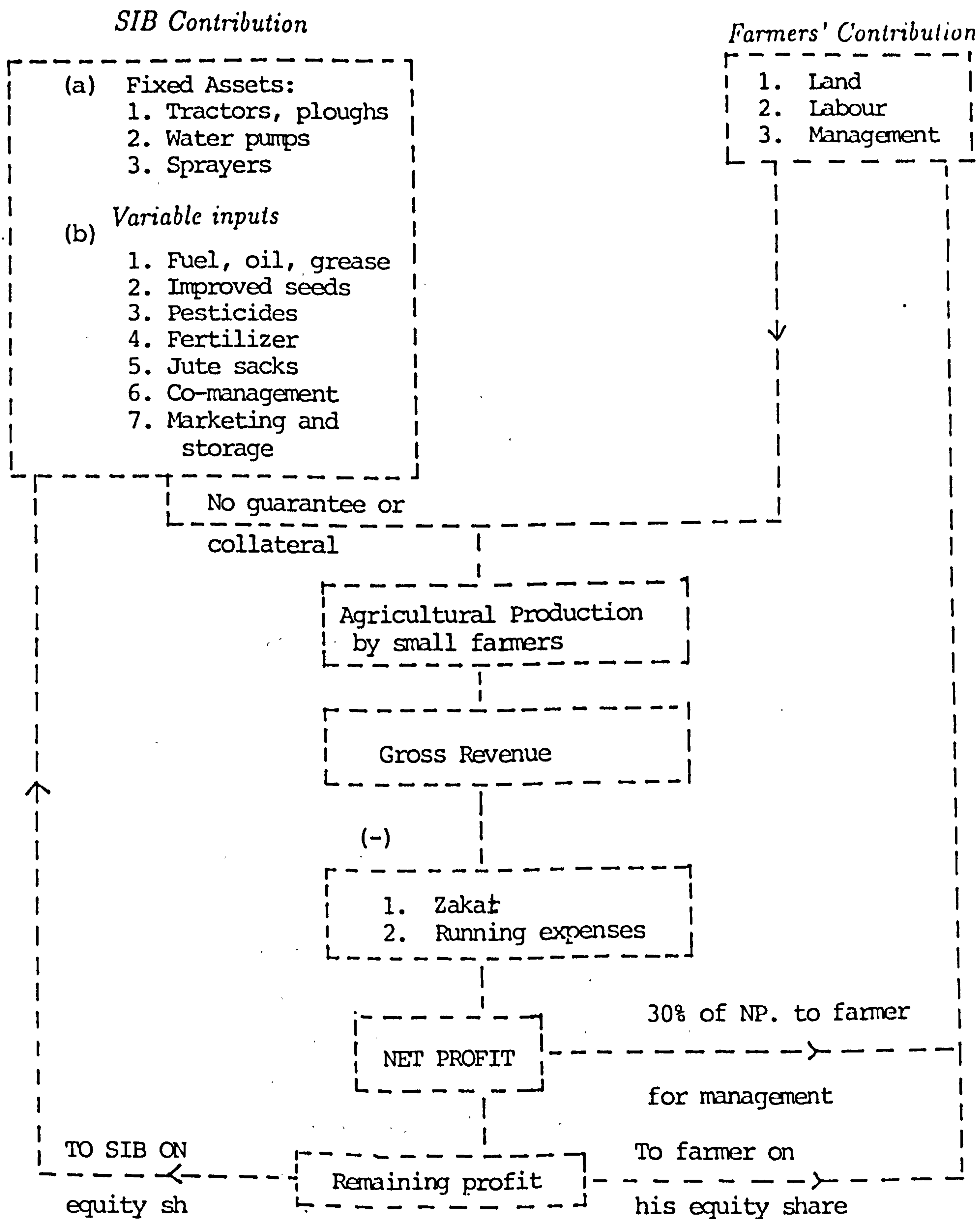
Besides his land, labour and management, the farmer has to contribute part of the capital. The SIB prepares the land, provides inputs, transportation,

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Figure: (10.1)

Agricultural Financing Model



Note: The model explained above varies according to:

- (a) Method of irrigation, (b) Type of land tenure,*
- (c) Cropping pattern and types of crops, and (d) Locality.*

We, therefore, have 3 more sub models explained in

Figure: (10.1)a, (10.1)b, and (10.1)c.

storing and part of the capital.

From the net profit the farmer gets 25-40% for management. The remaining profit is divided between the farmer and SIB according to their capital contribution as shown in Figure (10.1)a.

10.6.3. Pump Irrigation

The contribution of SIB and the farmer are the same as in the above figure, but no running expenses are paid by either. In addition SIB has to provide water pumps with running expenses and maintenance.

The farmer gets 70% of the net profit, while the Bank gets 30%. In case of crop failure the farmer bears no losses as shown in Figure (10.1)b.

10.6.4. Rainfed Scheme

The farmer has to clean the land from trees and bushes. He sows and harvests the crop. Besides management he bears some of the running expenses. The Bank prepares the land for sowing at cost, provides transport, storing, co-management and part of the capital.

The farmer gets 30% of the net profit for management. The remaining profit is divided between the farmer and the Bank according to their capital contribution as shown in Figure (10.1)c.

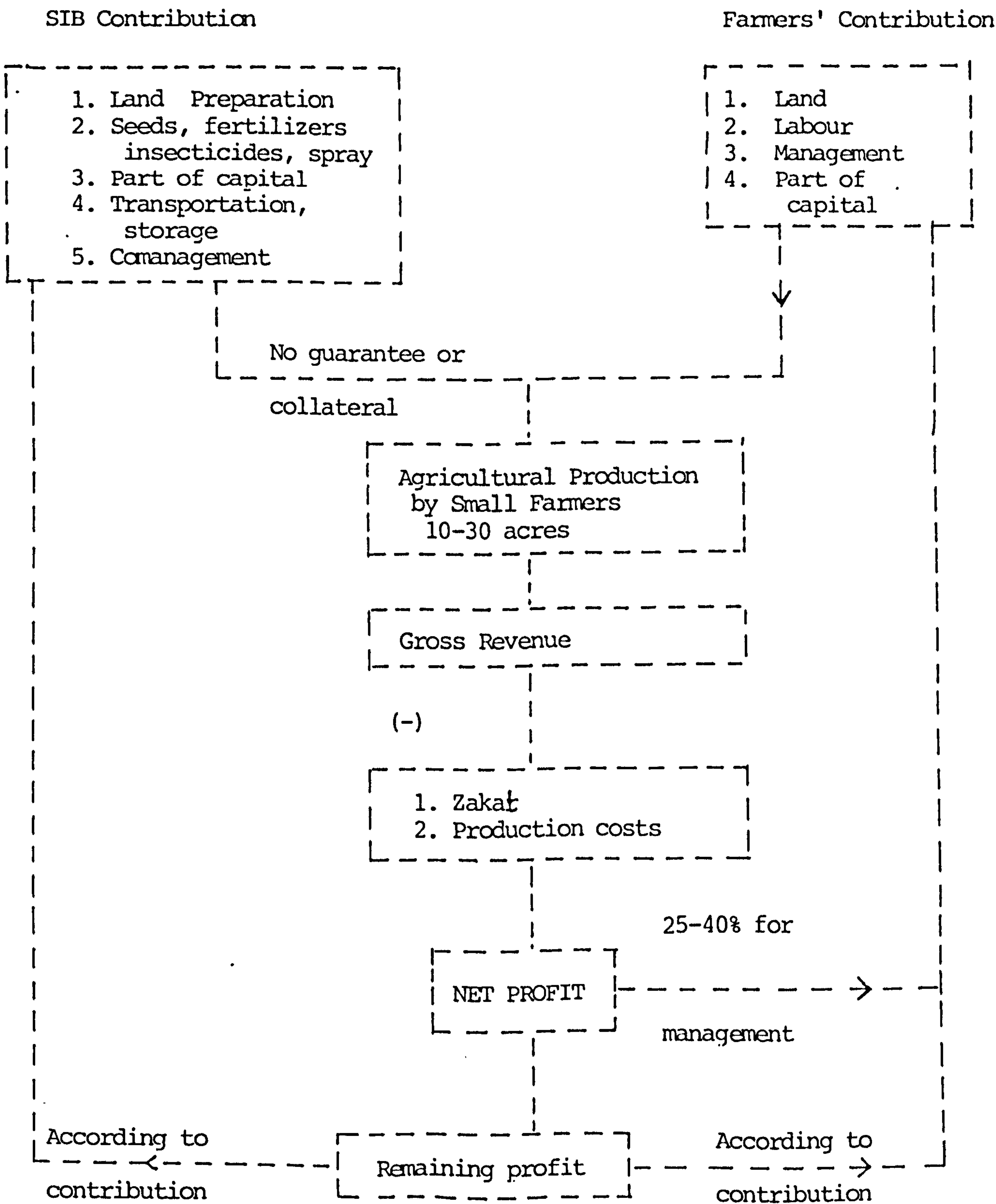
10.6.5. The Family Poultry Production Project

The Bank also provides finance for poultry production projects involving poor families. The projects are executed in close collaboration with the Ministry of Social Welfare, the Ministry of Animal Wealth and the Ministry of Finance and National Planning and consist of supplying battery cages of 95 layer capacity with hens at the start of laying to each family. SIB provides feeds, veterinary care and drugs at cost price in addition to management advice through its staff who undertake regular visits to these families. Inputs are provided on the basis of *bai muajal* (deferred payment system) and families are required to repay in fourteen monthly installments. SIB undertakes to replace pullets in the event of an epidemic

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Figure: (10.1)a

Canal Irrigated Schemes



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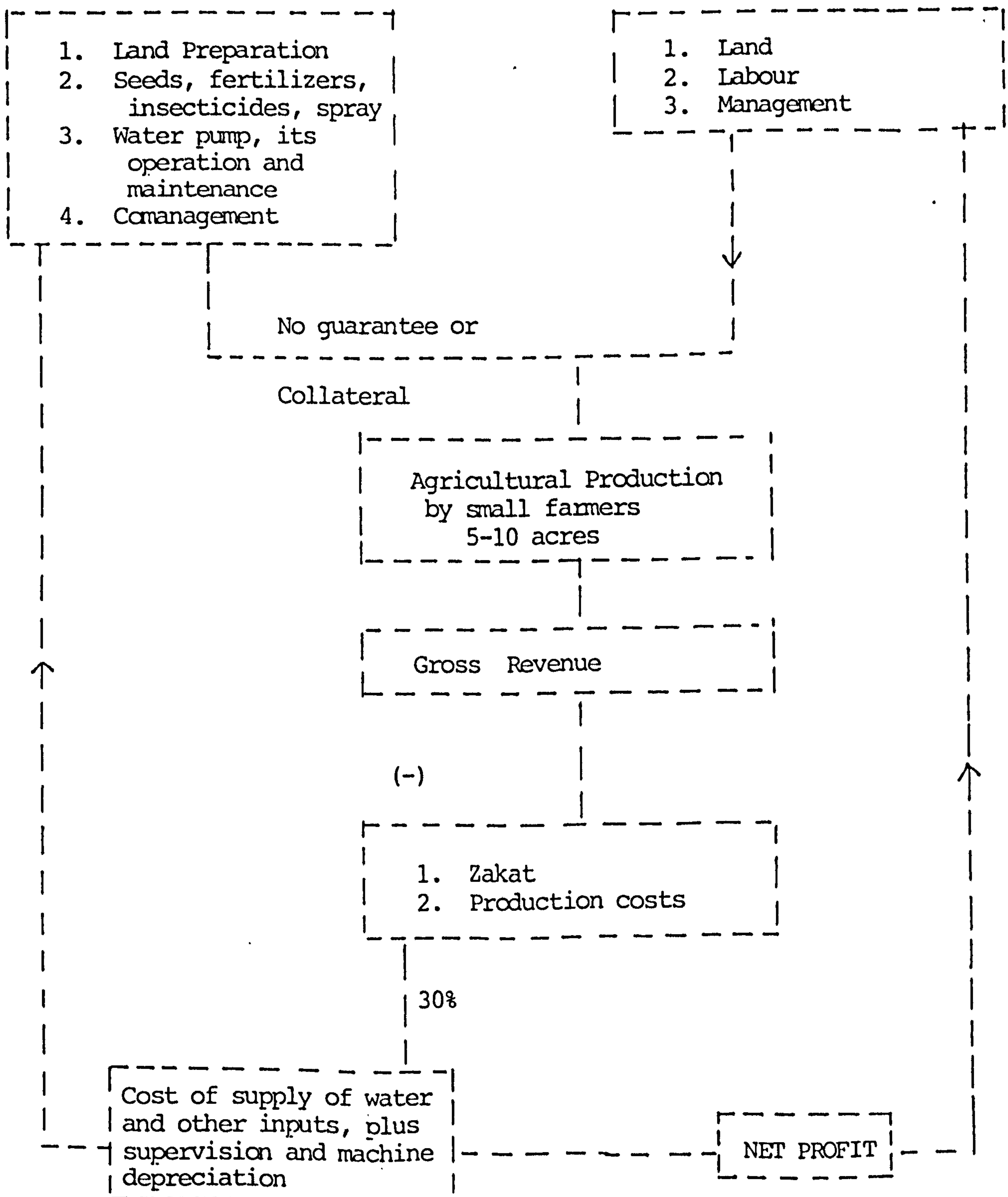
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Figure: (10.1)b

Pump Irrigated Schemes

SIB Contribution

Farmers' Contribution



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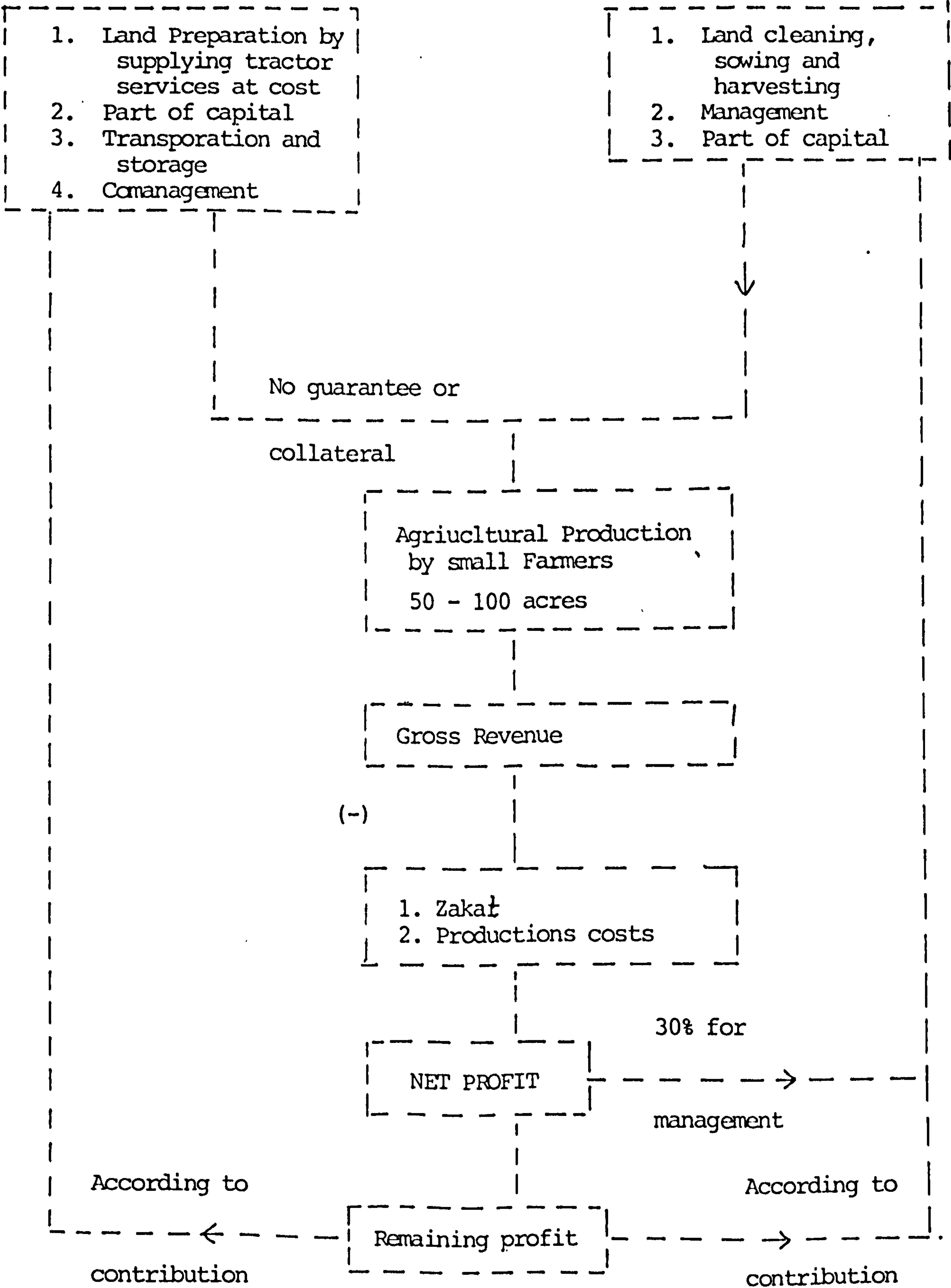
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Figure: (10.1)c

Rain Irrigated Schemes

SIB Contribution

Farmers' Contribution



resulting in high mortality rates.

10.7. Balance Sheet, Development & Profit and Loss Accounts

Table 10.3., shows the balance sheet of the Bank as on 30.12.1407H.

10.7.1. Fixed Assests

Fixed assests totalled £S 10.3 million by the end of 1407H, compared with £S 8.3 million at the end of 1406H, an increase of £S 2 million (24.1%). This increase was due to the expansionary policy adopted by the Bank which dictated the increase in fixed assets.

10.7.2. Assets and Liabilities

Total assets and liabilities of the Bank increased at the end of 1407H to £S 270 million as compared to £S 177.2 million at the end of 1406H, an increase of £S 92.8 million which is percentage increase of 52.4%.

10.7.3. Growth of Deposits

The data available suggests that the Sudanese Islamic Bank has been successful in attracting customers at a reasonable rate. The number of current accounts, investment and savings accounts reached 14306 by the end of 1407H compared to 11565 accounts at the end of 1406H. This stands as real evidence of the expansion of the basis of the Bank's dealing by 23.7%.

Total deposits increased from £S 117 million at the end of 1406H to £S 181.9 million by the end of 1407H, an increase of £S 64.9 million (55.5%). An examination of the average amount held in a deposit account does indicate a growth as shown in Figure 10.2 . The increase in the number of account holders, particularly those with a savings or investment, may be taken to reflect growing confidence in the institution.

There was also significant increase in the number and value of current deposits in local currency which reached £S 190.3 million by the end of 1407H, compared with £S 95.7 million at the end of 1406H, an increase of £S 64.6 million

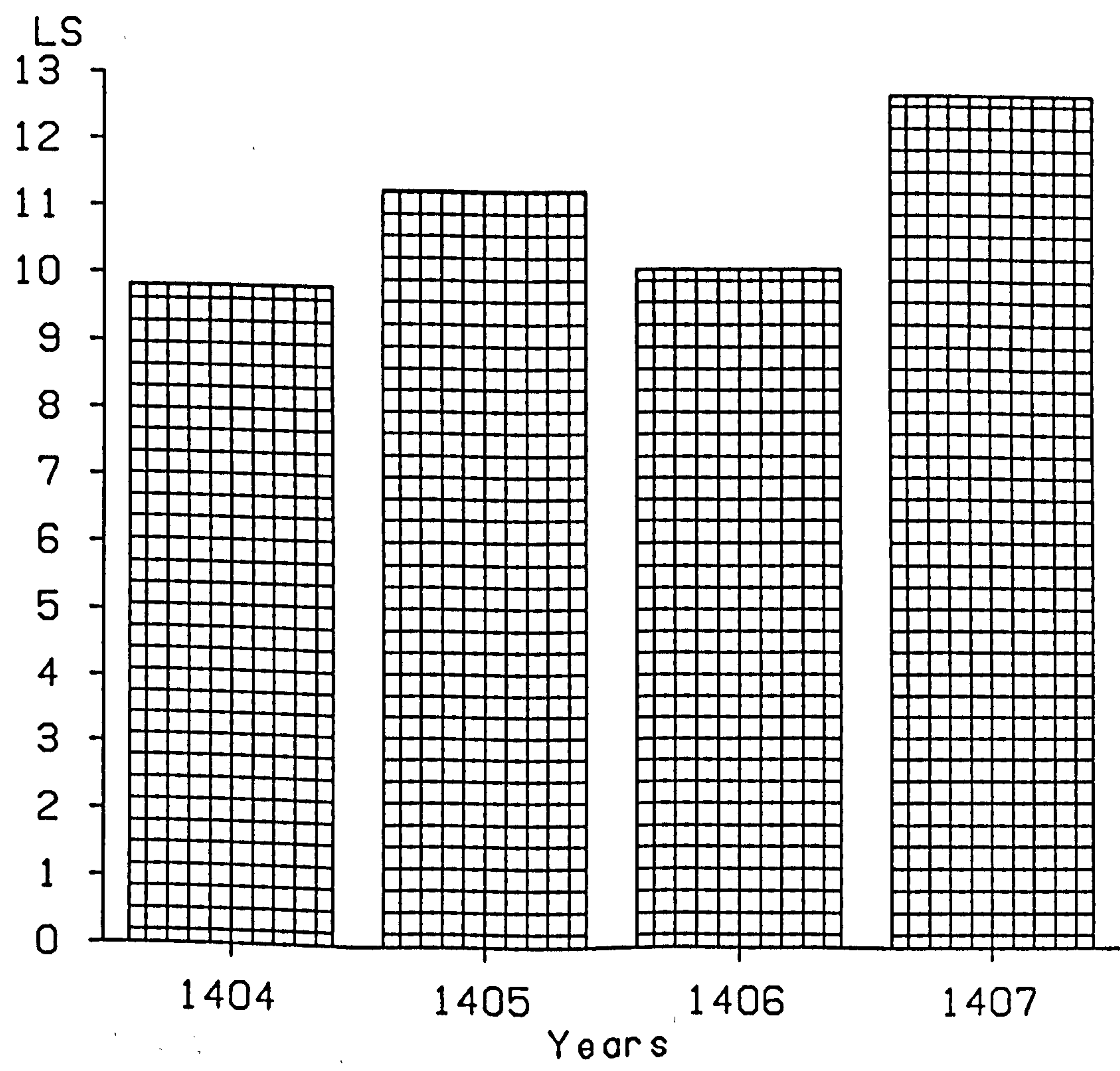
Table 10.3.

BALANCE SHEET OF THE BANK AS AT 30.12.1407H

ASSETS	30.12.1407H	30.12.1406H
Cash in Hands and Banks	167,522,316	93,245,784
Bills Receivable	4,238,083	2,117,965
	<u>171,760,399</u>	<u>95,363,749</u>
Current Investment Operations	63,084,524	55,679,090
Other Debit balance	10,677,456	10,469,418
Other Financing	5,944,209	-
	<u>251,466,588</u>	<u>161,512,257</u>
Long Term Investments	7,065,133	5,940,132
Other Assets	1,197,089	1,381,672
Fixed Assets	10,307,435	8,327,562
	<u>270,036,245</u>	<u>177,161,623</u>
	=====	=====
LIABILITIES AND SHAREHOLDERS EQUITY		
Customer Deposits	181,941,029	117,004,642
Payable to Banks	643,435	324,950
Bills Payable & Certified Cheques	5,666,023	7,541,647
Margins on Documentary Credits	11,100,001	6,502,030
Other Credit Balances	14,533,524	12,655,253
Cover of Cheques and Transfers	23,425,450	-
	<u>237,309,462</u>	<u>144,028,522</u>
Paid Up Capital	23,910,681	23,535,275
General Reserve	1,563,846	1,342,380
Other Reserves	6,593,583	6,149,025
Accumulated Profits	658,673	2,106,421
	<u>32,726,783</u>	<u>23,133,101</u>
	=====	=====
MEMORANDUM ACCOUNTS		
Total	270,036,245	177,161,623
Documentary Credits	18,738,612	8,243,779
Letters of Guarantee	36,247,726	9,779,223
Banks (Bills Under Collection)	207,98	471,760
Cheques (Under Collection)	417,733	11,181,02
Travellers Cheques Stocks	362,550	85,431
	<u>55,787,419</u>	<u>20,467,177</u>
TOTAL	=====	=====

Source: Bank's Annual Report March 1988

Figure: 10.2. Average Value of a Deposit Account



(67.5%). Savings deposits increased by £S 3.7 million, a growth of 100% over the volume of 1406H. Investment deposits declined from £S 12.1 million at the end of 1406H to £S 10.4 million by the end of 1407H, a loss of £S 1.7 million (14%). The Bank's reluctance to accept new investment deposits was due to the narrow lending ceiling imposed by the Bank of Sudan. Such a ceiling does not allow a proper investment of deposits, held by individual banks.

On November 1986 the Credit Ceiling Policy of the Bank of Sudan laid down the following regulations⁷.

(1) Each bank must operate within a definite credit ceiling as defined by the Bank of Sudan.

(2) Finance for export must not be less than 30% of the total credit ceiling of any bank.

(3) Finance for the working capital of the manufacturing industry must not be less than 25% of the total credit ceiling of any bank.

(4) Medium and long term advances and participation in productive undertakings and companies must not be less than 35% of the total credit ceiling of any private sector bank (non-state owned banks). However, these advances must not exceed 20% of the total credit ceiling of any public sector bank (state owned banks).

(5) Short term advances must not exceed 65% of the credit ceiling of any bank.

(6) The co-national-foreign banks' advances to the domestic trade and for other purposes must not exceed 10% of their credit ceiling.

(7) The state-owned bank's advances to development projects, domestic trade and other purposes must not exceed 45% of their credit ceiling.

(8) The foreign bank's advances for import and other purposes must not

⁷ Bank of Sudan, *The Credit Ceiling Policy*, Khartoum, November 1986:

exceed 10% of their credit ceiling.

(9) The legal reserves must not be less than 20% of the total deposits.

(10) If a customer wishes to import goods which are not allowed to be imported (the Bank of Sudan defines the important goods which are permitted), he must finance them from his own funds and banks are under no circumstances allowed to give him a loan for such a purpose. However, if he wishes to import an important commodity, he must pay 40% of its cost in advance and such a percentage could be decreased to 10% for inputs to agricultural and manufacturing industries.

Consequently, the government seeks further participation from the banking sector in the productive sectors. Moreover, it requires the banking sector to diminish its facilities for imports with the aim of reducing the deficit in the balance of payments. Nevertheless, the banking sector concentrates on short term advances, particularly imports and domestic trade.

Deposits in foreign currency declined from £S 5.5 million at the end of 1406H to £S 3.8 million by the end of 1407H. This represents a drop £S 1.7 million (21%). The Bank did not encourage new deposits because of the difficulty in utilizing them as the Bank of Sudan (the Central Bank) strictly regulates the utilization of foreign currency.

Table 10.4., shows the statement of profit and loss of the bank accumulated for the period from 30/12/1406H to 30/12/1407H.

10.7.4. Profit and Loss (Revenue)

The revenue of the bank for the 1407H, totalled £S 11.2 million compared with £S 13.6 million in the year 1406H, with a decrease of £S 2.4 million (17.5%).

The regulations of the Bank of Sudan regarding the financing of imports, has had a bad affect on the bank's (SIB) balance of its investment revenue which totalled £S 7.7 million in 1407H, compared with £S 8.5 million in 1406H.

The revenue of banking services decreased to £S 3.1 million in 1407H, compared with £S 3.2 million in 1406H, representing a decrease of £S 0.1 million

Table 10.4.

**STATEMENT OF PROFIT AND LOSS ACCUMULATED
FOR THE PERIOD FROM 30/12/1406H. TO 30/12/1407H**

	30.12.1407H	30.12.1406H
Investment Revenue Received	7,692,417	8,530,580
Banking Services Revenue Received	3,226,990	3,113,409
Exchange Received	144,478	786,167
Other Revenues Received	175,209	1,196,963
	<hr/>	<hr/>
Total	11,239,094	13,627,119
General & Administration Expenses	8,812,405	7,926,198
	<hr/>	<hr/>
Net Profit Before Zakat & Tax	2,426,689	5,700,921
Zakat & Tax	1,548,016	2,234,337
	<hr/>	<hr/>
Net Profit for the Period	878,673	3,466,584
Accumulated Profits at the beginning of the Period	2,106,421	1,427,202
	<hr/>	<hr/>
	2,985,094	4,893,786
General Reserve(25% of net Dividend for the period)	220,000	866,846
Dividend Paid	2,106,421	1,427,202
Proposed Dividend	-	493,517
	<hr/>	<hr/>
Accumulated Profit at the end of the period	658,673	2,106,421
	<hr/>	<hr/>

Source: Bank's Annual Report, March 1988

(3.2%). This was due to the restrictions on imports which negatively affected the performance of the documentary credit department (import L/Cs), the main source of banking services revenue.

10.7.5. Profit Distribution

The net profits of the Bank for the year 1407H, before taxation and *zakat*, reached £S 2,426,689 million. £S 500,000 was allocated for *zakat* and £S 1,048,016 for taxation in addition to £S 200,000 kept as a legal Reserve. The remaining £S 658,673 can be distributed as dividend at a rate of 2.75% approximately. This represents the average percentage of dividend achieved by the banks in the year 1407H. This low rate can be traced to the hardships faced by the banks in their activities and the increase in the rate of taxation.

10.7.6. Zakat

Total amounts paid by the Bank in fulfillment of *zakat* and distributed to its lawful channels through the *Zakat* Committee reached £S 1,206,561 as shown in Table 10.5.

Table 10.5.
PAYMENT OF ZAKAT BY THE BANK

Year	Amount in £S.Pound
30.10.1405H	165,000
30.12.1406H	541,561
30.12.1407H	500,000
TOTAL	1,206,561

Source: Bank's Annual Report, March 1988

10.8. Bank's Investment

Unlike other Islamic banks, SIB *musharakah* operations dominate the financing operation and its significance has increased rapidly over time. Investment operations concluded during 1407H amounted to £S 146 million as shown in Table 10.6.

Table 10.6.
INVESTMENT DURING 1406-1407H
(£S. 000's)

Type of Investment	Total 1406	%	Total 1407	%
Murabaha	63,77	52.4	56,609	38.8
Musharakah	56,47	46.4	89,020	60.9
Mudarabah	1,460	1.2	00,398	0.3
TOTAL	121,700	100.0	146.027	100.0

Source: Bank's Annual Report, March 1987-88

The figures indicate that the Bank's operations based on *musharakah* financing increased during 1407H. *Musharakah* represent 60.9% of total investment concluded compared with 46.4% in the year 1406H. Through *musharakah* financing the Sudanese Islamic Bank has given a high priority to agriculture which is at the heart of the economy. On the other hand, in 1407H, more than 38% of financial operations of SIB were based on *murabaha*. However, its proportion has decreased from 52% in 1406H.

Finance provided by the SIB to any sector depends on two facts, the mode of finance and the terms of finance. Evidence from the data suggests that finance to the strategic commodities sector is provided by the Bank on the basis of *murabaha* since the financial needs of trade are of a short-term nature. However, it seems that SIB has to diversify its financing operations sectorally and satisfy the needs of the agricultural and other sectors.

The Bank has also paid special attention to socio-economic development, widening the scope of its finance to cover development based on a strategy of rural development, financing small farmers, producers, and artisans.

Despite the changes in its credit policy, the Bank has been successful in creating an equilibrium in its investment amongst the different sectors and its sources represented in owners equity and client's deposits, savings and current accounts.

The Bank was able to increase the magnitude of its investment from £S 50.3 million at the end of 1405H, to £S 141.6 million at the end of 1406H with an increase of £S 91.3 million (35.5%). At the end of 1407H the Bank's operation amounted to £S 146.027 million where *musharakah* represented 61% of the total investment concluded. The Bank committed itself to operate in a wide base of small investors and to distribute its investment operations among the main sectors of strategic commodities, the agricultural sector, the industrial sector, consumer goods, building materials and the transportation sector. Total Bank investment in these sectors amounted to 98.6% of its total investment as shown in Table 10.7.

Table 10.7.
BANK'S INVESTMENT IN
VARIOUS SECTORS DURING 1407H

Sector		1406H		1407H
	000's	%	000's	%
Agricultural Sector	48,266	29.4	48,817	33.5
Industrial Sector	15,489	9.4	37,701	25.8
Strategic Commodities Sec.	34,162	20.8	25,997	17.8
Transport Sector	29,602	18.1	21,497	14.7
Consumer Goods Sector	15,681	9.6	7,922	5.4
Construction Sector	17,475	10.7	1,990	1.4
Artisan Sector	1,450	0.9	1,372	0.9
Other	1,804	1.1	0,731	0.5
TOTAL	163,927	100.0	146,027	100.0

Source: Bank's Annual Report, March 1988

10.9. Bank's Operations

The Sudanese Islamic Bank conducts normal banking operations like most other Islamic banks. The Bank modifies its operations if some banking practices do not conform to the *shariah*. Its banking practices include: accepting cash deposits for safe custody and investment; giving credits and loans in conformity with the *shariah*; purchase and sale of foreign exchange, issuing letter of credit, collecting the value of drafts, cheques, promisory notes, bills of lading etc., on commission. Most of these functions are also performed by traditional commercial banks but Islamic banks perform these in such a way so as not to violate any *shariah* rules⁸. For example an Islamic bank buys and sells foreign exchange and gold bullion etc., only at the spot rate.

⁸ Ahmed, A., *Development and Problems of Islamic Banks*, Islamic Research and Training Institute, Islamic Development Bank, Jeddah, 1987, pp. 33-34.

Musharakah seems to be more popular at this time amongst the Sudanese Islamic Bank operations. However, data for three years 1405-1407H show a more diversified use of the three main techniques. In 1405H, it undertook 703 *murabaha* operations which accounted for 66% of the total and the rest were distributed between *musharakah* which claimed 32% and *mudarabah* which accounted for 2%. In 1406H, the Sudanese Islamic Bank undertook 1115 *murabaha* operations which constituted approximately 52% of the total number. The significance of *musharakah* increased to 48% and *mudarabah* came down to 0.76%. The Bank undertook *murabaha* operations which accounted for 46.7% of the total finance in 1407H. The remaining was distributed between *musharakah* which accounted for 52.9% of finance and *mudarabah* which claimed 0.4%. If one averages over the three year period the evidence suggests that *murabaha* is the most popular and dominant technique of financing in the Sudanese Islamic Bank operations followed by *musharakah*.

For *musharakah*, as for the two other financing instruments, the Bank would evaluate the project presented by clients in order to assess its viability. Upon approval of an application, a *musharakah* contract is signed between the Bank and the client (who becomes a partner). The contract specifies all the details relating to the contribution of each partner in capital, management and profits as well as the controls regulating relations between the two partners. As soon as the contract is signed, a joint-account in the name of the partnership is opened, and withdrawal of the deposited amounts would be controlled by the pre-agreed plan of operations contained in the contract. Goods purchased from partnership funds are normally kept under dual custody of both partners, thus serving as a collateral. To ensure compliance with the contract, the Bank undertakes general supervision and monitoring of the progress of operations. The *musharakah* contracts concluded by the Bank cover three main fields. These are trade, industrial investment and agricultural investment.

10.9.1. Musharakah in Trade

The Bank realized the importance of short term financing for trade. However, trading *musharakah* operations cover three spheres; domestic, export and import trade. For the conclusion of contracts on trading operations, the Bank undertakes an evaluation of the feasibility of the project and will focus on cost, returns and rate of turnover for the commodity in question. In the process of evaluation, SIB takes into consideration the compliance of the project with the investment policy adopted by SIB and the credit policy announced by the Bank of Sudan. It has to be emphasised here that in Islamic financing, the viability of the commercial transaction itself rather than the credit worthiness of the client, is the vitally important issue which the banks take into consideration. This is a basic difference between debt financing of the conventional banking sector and equity financing of the Islamic banking.

As for all types of *musharakah* contracts, trading partnerships concluded by the Bank are guided by a manual embodying the *shariah*, administrative and accounting regulations governing the contract. In this regard, SIB adopts the *shariah* principle conceding allocation of disproportional shares in profits to the partners (an additional share is granted to client-partners for management, for example), and adheres to the principle of bearing losses in proportion to the contribution. In addition to the joint management of the bank account, trading *musharakah* contracts stipulate joint storing and Islamic insurance of the commodity. Table 10.8., given as an example, concerns a commodity with an invoice value of £S 1,602,000 millions in an operation extending for four months, typifies liquidation of trading *musharakah* undertaken by the Bank.

In cases of import trade, SIB sometimes enters into *musharakah* for the clearance of commodities through customs only (i.e. *musharakah* in services). In such instances, the partner would have provided the foreign exchange component, and SIB would contribute the local component to cover clearance and customs. The cost of the service provided would be calculated as a proportion of the capital. In a similar manner to the example stated above, the same procedures are followed

Table No. 10.8.
MUSHARAKAH IN TRADING TRANSACTION FOR THE
PURCHASE AND SALE OF SESAME SEED.
ESTIMATED PERIOD FOR LIQUIDATING
TRANSACTION OF FOUR MONTHS

Quantity			1000 millions
Cost			Pounds Sudanese
Purchase Price £S.1602 Per Metric Tan			
Total Purchase Price	=	1000×1602	= 1,602,000
Other Expenses	=	1000×333	= 333,000
Storage and Dues			
Total Capital			= 1,935,000
Equity shares			
Bank's Share 75%	=	1,451,250	
Client's Share 25%	=	483,750	= 1,935,000
Proceeds of sales			
1000 Tans×2337			= 2,337,000
Total Costs			= 1,935,000
Profit			= 402,000
Distribution of Profits			
According to contract			
			Client Bank
402,000	25% for Management	100,500	
-100,500			
307,500	75% for Bank		226,125
	25% for Client	75,375	
Profit Accruing to Partners		175,875	226,125
Equity		483,750	1,451,250
Total Amount Accruing to Partners		659,625	1,677,375
Profit Percentage		36%	15%
Annualized Percentage		108%	45%

Source: Islamic Banking: Experience in Sudan,
paper presented to the seminar on Islamic Banking
at Loughborough University of Technology,
July 1988, England, p.9.

for the determination of the respective shares of partners and the percentage to be allocated in return for management.

10.9.2. Musharakah in Industrial Investment

Industrial investment has been given a steadily growing share in SIB's investment operations and it takes one of two forms:

- (1) Musharakah in fixed assets.
- (2) Musharakah in working capital.

Musharakah in fixed assets utilizes a formula of "diminishing partnership" whereby at the time of liquidation the partner-client would become the sole owner of assets. Upon approval of application, SIB negotiates the basis of partnership, determines the respective contributions of partners and the industrial establishment's mode of operation. The SIB will normally be involved in *musharakah* in working capital as well. A contract is subsequently signed specifying the details of the partnership, the respective contributions and shares of partners and the responsibility for management⁹. In contracts stipulating diminishing partnership, the partner-client would undertake to allocate a portion of his annual profits for the purchase of a certain pre-agreed percentage, (say for example 20%), of SIB's contribution to the partnership. In effect, the respective contributions of the partners do not remain the same for the whole duration of the partnership. At the end of the first year, the partner-client would come to increase his contribution by buying part of SIB's. If the part bought each year is 20%, then at the end of the fifth year, the whole remaining portion of the SIB would have been taken over by the partner-client.

(2) Musharakah in Working Capital:

This second form of industrial partnership is characterized by being short in duration, typically extending for one working season, normally six months. Under such partnerships, the contribution of the partner-client is usually provided in the

⁹ Khaleefa, M. U., and Ibrahim, S. E. A., *The Experience of SIB in Musharakah Financing*, Paper presented at the Seminar on Islamic Banking, Jointly Organised by International Association for Islamic Economics, Islamic Foundation and Loughborough University of Technology, July 1988, p. 11.

form of depreciation of fixed assets, whereas the SIB would contribute operational costs and expenses. The contract specifies a percentage of profits for management (usually 25%), to be given to the client-partner, and the remaining profits are divided in proportion to the respective contribution of each party.

10.10. Conclusions

The rural society and economy of Sudan form a vital component of the national structure. Not only does a substantial proportion of the population live in rural areas, but the national economy is itself dependent on rural activities, in particular agriculture. Within rural Sudan, however, there is obviously a wide range of problems and difficulties to be faced. These range from basic services, to the more complex problems that have been posed by the process of development itself, such as rising aspirations of an increasingly educated populace.

The Sudanese Islamic Bank has been conscious of the problems of the rural sector since its inception and various attempts have been made to tackle them. Much of the effort has, however, been fragmented, with little attempt to solve the root causes of the difficulties. This is in part due to the fact that problems of the rural areas are indeed complex and extremely difficult to isolate.

The rural development programme of the Bank has thus gained considerable momentum since its initiation in 1985. A detailed organisation has been set in place, centred on the Rural Development Department (RDD). This department provides the foundation for the rural development programme which is mobilised with the support of the Bank's Board of Directors. The overall strategy is focused on financing small farmers in order to improve their living standards and increased demand for agricultural products to achieve food security.

The major criticism of the overall programme, however, concerns the allocation of priorities to various activities. While the overall framework appears to be satisfactory, there is a need for reconsideration of both the allocation of priorities and resources. This applies not only to financial, but also to physical and human resources.

Nevertheless, the foregoing analysis, suggests that the rural development programme is established along the right lines and, given its current structure, offers considerable scope for the successful development of the rural sector.

CHAPTER ELEVEN

THE EXPERIENCE OF THE SUDANESE ISLAMIC BANK IN MUSHARAKAH FINANCING

Introduction

The purpose of this chapter is to assess the experience of the Sudanese Islamic Bank in *musharakah* financing. The chapter is divided into eleven sections. The first will highlight the scope of the study. The second will assess the type of farm activity within the schemes, family structure, farm size, cultivation patterns, crop production, and its importance to the farmers. In the third, we will discuss the major cash crops for the farmers and in the fourth their income. Fifth, we will examine the state of agricultural credit. The relation of the farmer with financial institutions will be highlighted in the sixth section. The seventh will assess the problems facing the farmers and the eighth the various types of bank's credit facilities. The advantages of the Sudanese Islamic Bank credit schemes will be analysed in the ninth section and comments by the farmers will be assessed in the tenth. Finally, some conclusion will be drawn on the experience of the bank in *musharakah* financing.

11.1. The Scope of the Study

The questionnaire was distributed among fifty small farmers (who deal with the Sudanese Islamic Bank) in two schemes mainly Shehenab (North Omdurman) and Islang-Island.

The agricultural project in Shehenab lies about 50 kilometres north of Omdurman and encloses an approximate area of 53 feddans. The Islang-Island project is about 17 kilometres from Khartoum, the capital of Sudan. Both of the schemes are irrigated by pumping water from the river Nile. The main crops in the two areas are potatoes in the winter and tomatoes and onions during summer.

The majority of schemes in Khartoum province (where the two projects are located) are devoted to vegetable and fruit production for the high-income market of the three towns. There are even larger areas earmarked for cereals and fod-

der. The use of machinery in these schemes, as in the Northern province, is less common than in the cotton growing areas. It is more or less restricted to larger schemes in the Northern province although there is widespread use of contracted machine services in Khartoum province. Bulls are still widely used for ploughing and, where practised, ridging. Most crops are grown in borders which are made up by hand. Cropping is intensive and generally the use of fertilizer is more widespread in schemes relating to fruit and vegetable production. In Khartoum province fruit ranges in importance from citrus to mango, banana and guava in that order. Thus land holdings should be limited to a manageable size. This is especially so because the labour intensive nature of agriculture implies that a larger land holding requires a much greater amount of assistance.

The two projects in Shehenab and Islang-Island areas are based on partnership financing *musharakah* where the Sudanese Islamic Bank (SIB) provides most of the agricultural inputs e.g. seeds, fertilizer and part of the running expenses without collateral and/ or guarantee. The Bank also owns fixed assets and provides the services of the machinery to farmers at actual cost price. The farmers contribute with their land, labour, management and part of the running expenses.

11.2. Type of Farm Activity

The farmers surveyed produce vegetables, fruits and fodder for grazing their animals. Vegetables account for 94% of farm output and fodder production accounts for 4%. They also produce fruit which account for 2% (as shown in Table 11.1.).

Table 11.1.

TYPE OF ACTIVITY

Crops	Percentage
Vegetables	94.0
Fodders	4.0
Fruits	2.0
TOTAL	100.0

Source: Survey finding

Other farming activities in the schemes are livestock rearing. Livestock is owned by every farmer. It is one of the main sources of livelihood for the people and provides the means through which increased income could be achieved.

As the above figures indicate the farmers dedicate a large part of their land to vegetable production. The reason may be that prior to the Bank's establishment all agricultural activity was limited to vegetable production for subsistence. A continued dependency on almost one crop will undoubtedly make the farmers more vulnerable to environmental hazards, natural calamities and price fluctuations. Therefore the Bank should attempt to convince the farmers that it will be rational and beneficial to diversify their crops.

It was observed that the farmers who deal with the Bank are young and inexperienced. As much as 60% of them started farming in 1950, 1960 and 1970 whereas 40% of them have started since 1975 either having come of age then or after realising that the potential for growth in agriculture is still greater than in other sectors of the economy. Perhaps one can argue that *musharakah* financing introduced by the Bank through its incentive elements has given more hopes to young and poor farmers to work hard and cultivate their land. They became a partner through the new system, sharing the risk and profit with the Bank. If this system is well managed and proves to be successful, the number of young farmers will increase in the rural areas. These farmers, because of incentives provided under the *musharakah*

financing system, will stay in the rural areas cultivating their land instead of migrating to the big cities in search of a job. The big cities are already suffering from an increasing rate of unemployment resulting from economic deterioration.

11.2.1. Family Structure

In the rural areas of Sudan a family generally comprises of a farmer's immediate family, that is his wife and children, and aged dependents, such as his parents and unmarried sisters. It is usual for younger brother(s) of the farmer to help his elder and thus also be a part of the family. Occasionally, a brother breaks away to be a farmer in his own right. The data revealed that 22% of the farm families have more than 10 persons which indicates that the average family size tends to be large. Farmers who have to care for 6 to 10 persons form 52% of the total. This may be attributed to economic and financial factors as a relatively small family reduces the pressure on small farmers. As many as 26% of the farmers have no immediate family either because they are not married yet or because they cannot afford to get married. Some are married but have restricted their dependents to between 1 to 5 persons (see Table 11.2.).

Table. 11.2.
FREQUENCY DISTRIBUTION OF FARMERS
ACCORDING TO FAMILY SIZE

No. of members per household	No. of farmers	No. of farmers as a % of total number
None	1	2
1-5 persons	12	24
6-10 persons	26	52
More than 10 persons	11	22
TOTAL	50	100

Any reduction in family size is indeed a promising sign for the government in its attempt to alleviate the food and nutrition problems. More so because the government can not enforce a birth control programme in view of opposition from religious quarters. It is obvious, however, that in many developing countries the population growth exceeds the growth in food production. This results in their transformation from net grain exporters to net grain importers.

Further it was noticed that young boys were generally not interested in agriculture. Abdelkarim refers to the "wrong" educational policies which put little emphasis on agriculture, the result of which is "once a son acquired a little education, he would look for employment outside the scheme or loaf"¹.

It was also noted that prior to the introduction of *musharakah* the household had been especially deprived of using a significant part of its potential labour force; the women. While earlier it was usual for women to work alongside family men, it was considered improper for women to work in the fields in the recent past. It was felt during the survey that the Bank should encourage the participation of women in agricultural activity.

11.2.2. Farm Size and Cultivation Patterns

Before the Bank initiated its schemes in the Shehenab and Islang-Island areas the agricultural activity among the farmers with small land holdings was marginal. On the other hand those with a large land holding did not cultivate their land by themselves. These large land owners depended on outside labour, provided by the poor farmers in the region as well as wage labourers settled in the area.

Share cropping arrangements were and are generally practised by farmers with large holdings. This kind of arrangement involves already "free" wage labourers who depend on selling their labour to secure subsistence. It is an unofficial agreement between the farmer and the wage labourer where the farmer agrees to temporarily abandon his right to use the land. This right is offered to the wage worker who in

¹ Abdelkarim, A., *Social Forms of Organization of labour in the Sudan Gezira*, Discussion paper No. 171, November 1984, School of Development Studies, Norwich, p. 12.

turn is responsible for harvesting the land. The farmer remains the legal producer and the wage worker gets a small share of the produce.

Not surprisingly the amount of labour used in the farm depends on the size of the farm. It was found that landowners with low farm sizes hired between 1-5 workers (which accounted for 74%) and those with large farm sizes hired more than 6 workers (which accounted for 26%). Therefore, the small farmers are more active as a labour force and depend on themselves to cultivate the land. This could be attributed to the introduction of *musharakah* financing in agriculture where the relationship between the Bank and the farmer has changed. The farmer became a partner with the Bank (sharing the risk and gaining the profit) in the new arrangement. He also became more active in farming, depending on himself rather than outside labour. Even when they required outside labour they tend to hire limited numbers, usually between 1-5 workers as shown in Table 11.3.

Table. 11.3.
NUMBER OF OUTSIDE LABOURERS
IN SHEHENAB AND ISLANG-ISLAND SCHEMES

No. of outside labourers	Percentage
1 - 5	74.0
6 - 10	20.0
More than 10	6.0
TOTAL	100.0

Source: Survey finding

Age seems to be an important factor in determining the level of employment. The farmers are in a more favourable position to do the manual work as they are generally young. On the average each farmer has about 1-5 workers engaged in farm activities. This makes it possible to depend mainly on their own labour (provided that the household forms one production unit, which is apparently the case with

most of the households) and more than half of the farmers do not require extra workers at any stage, while the others need it only very occasionally. It may be important to note that the average size of the farm will probably be smaller than the average holding that a farmer may have. On the occasions when extra household labour is required, it is for weeding and harvesting. Extra household labour is normally provided by wage labourers who are required to prepare the land, to sow seeds and to spray the chemicals.

The Bank in implementing its schemes targeted the small and poor farmers. The average farm size in the sample under study varied between 11-25 feddans which accounts for 20% of the total. Those with small farms (1-10 feddans) accounted for 70% and those with large farm sizes (11-51 feddans) accounted for 30% as shown in Table 11.4.

Table. 11.4.
 FARMING SIZE IN SHEHENAB
 AND ISLANG-ISLAND SCHEMES

Area cultivated (feddans)	Percentage
0 to 5	46.0
5-10	24.0
11-25	20.0
26-50	6.0
More than 51 feddans	4.0
TOTAL	100.0

Source: Survey finding

The data suggests that the farm sizes on average are small. Thus on such small holdings there is very little scope for mechanized farming, and each unit of labour has a small area of land to work with. Hence agricultural production is labour-intensive. Therefore, owners of small farms are numerous, but they own and cultivate only a small proportion of all the land.

An overwhelming 90% of the farmers cultivate their farms on their own land and the remaining 10% hire labour from outside to cultivate the farm.

It is clear from the above figure that the incentive system introduced by the bank through the *musharakah* financing has played a vital role in encouraging the poor farmers to cultivate their farm by themselves rather than depending on outside labour. Such a tendency will undoubtedly alleviate the labour shortage in the rural area of Sudan and will be a big relief to the government.

The farmers who cultivate their land more than twice per year represented 62% of the sample and 38% used the land either once or twice a year. Thus the introduction of “*musharakah*” has brought many changes. Whereas before its introduction land was only cultivated once a year, now the time for which the land is under cultivation has increased. The farmer has become more active in improving his farm and utilizing his land to the maximum. The Bank, through its Rural Development Department (RDD) provides agricultural inputs such as fertilizers. Consequently it is important that the Bank discourage excessive use of phosphates as it damages the soil.

11.2.3. Crop Production and its Importance to the Farmers

The farmers were asked about the nature of crops grown . The data indicates that the farmers cultivate more than one product. The results reveal the following:

Vegetables

Vegetables are the main crop which all farmers grow. This is due to their high marketability and turnover. These are grown in a large number of schemes in the area. Vegetable production contributes to both subsistence needs and to cash sales.

Although the vegetable gardens were originally intended to improve the diets of the farmers, the greater proportion of vegetables is in fact sold in local markets.

Fodder

The second important crop grown by the farmers is fodder which accounts for 8% of the cultivated area. However, there is still considerable scope for irrigated fodder production in the scheme. At present this is practised on a relatively small-scale. The Bank has a role to play in encouraging the farmer to cultivate fodder due to its importance as the main feed for their animals. The expansion of fodder production will play a major part in developing specialized lines of livestock enterprises in the scheme.

Also, the production of fodder can be increased through the control of disease, pests, etc. It is possible to reduce animal mortalities, hence increasing animal numbers. The crucial point is that the development of pasture resources coincide with increases in animal numbers without damaging and causing deterioration of the grazing lands. There is a danger involved in following this line of development if a completely controlled grazing use is not achieved.

Fruits

Fruits are the third important crop that the farmers grow in the scheme. Unfortunately, only 2% of the farmers cultivate them in spite of their high marketability. The Bank should encourage the farmers to increase their fruit production. Fruits can supplement the dietary and nutritional needs and there is a great potential for growth resulting from the changing dietary habits of the people. Bananas, grapefruit, mango and strawberries might develop to become commodities for local consumption.

Dura

Dura is regarded primarily as a staple food of the vast majority of the population. Sudan was one of the largest African producers of dura (sorghum) and it was the country's second most important export after cotton in normal years. There

were very wide fluctuations in production, with ranges of between 2 and 3 million tons in successive years. The fluctuations were largely due to the fact that over 90% of the crop was grown in the rainfed areas rather than areas served by irrigation. Recently the farmers have stopped growing dura, and the government has to import it, thus worsening the balance of payments. It was found that none of the small farmers in the scheme were cultivating dura. Since dura is one of the main diet items in Sudan, the Bank should encourage the farmer to cultivate the crop.

In the past the tenants, at the Gezira scheme for example, were discouraged from cultivating dura and many of the agricultural operations necessary for the crop were not practiced. It has been reported by many of the tenants that not enough water is provided for their dura crops. There are also many diseases and insects that affect crop yields and it has been reported that bird damage is particularly severe. In fact birds in many cases reduce the crop to bare straws².

Wheat

Consumption of wheat has been increasing year after year as a result of the increase in population, income and urbanization, combined with a change in dietary preferences. Unfortunately, it was found that the farmers do not grow wheat at all.

Groundnuts

Sudan is the second largest producer of groundnuts in Africa after Senegal, but there have been wide fluctuations in production in the past decade. There was a substantial increase in the area under groundnuts in the mid-1970. Yields were not, however, particularly high in recent years. Nevertheless the cultivation of groundnuts has become unattractive because of the different technological difficulties involved, taking into consideration the limited financial resources of the farmers in the scheme, they are not in a position to cultivate groundnuts at present.

² El-Hadari, A. E., *The Economics of Agricultural Production in the Private Pump Schemes*, Part II, Research Bulletin No. 15, April 1968, University of Khartoum, p. 17.

Sugar

Sugar products constitute an important item of the Sudanese diet. At present sugar is mainly an imported commodity although suitable ecological conditions exist in the Sudan for growing sugar cane. In the recent past sugar was one of the cornerstones of the "breadbasket" programme introduced by the Arab Authority for Agricultural Development with the objective of expanding sugar cane production. Yet, it has been discovered that none of the farmers grow sugar due to limited financial resources.

Forestry

Sudanese forest products can be divided into two: gum arabic and other woods. The country is the world's major producer of gum arabic, accounting for over 80% of the total. In 1983 gum arabic was the fourth most important export, bringing in \$64.3 million, or 9.4% of total exports. It was discovered that none of the farms surveyed had trees. The Bank should encourage them to grow forests in order to protect the soil of the farm from erosion.

The survey shows that the farmers consume more than one crop from outside their farms such as sugar, wheat and other crops. Sugar in many forms is an increasing part of the diet but it is mostly imported. While wheat is also brought from outside its consumption is lower than that of sugar. This may be attributed to the shortage of wheat in the market which may lead the farmers to replace it by dura as the main staple food in the area. The Bank can convince the farmers to change their consumption pattern. They should be more of a producer rather than a consumer. If wheat or dura proves to be economically feasible they would be better off if they cultivate these crops in order to satisfy their local demand.

In order to plan properly for the future it is essential that the Bank undertakes an exercise to find out the preferences of the farmer as to the relative importance of the various crops. Such an analysis will undoubtedly help the Bank management in economic forecasting. Keeping this in view the farmers were asked to indicate the relative importance, in their view, of the dura, dukhun, groundnuts, sesame

and sugar crops. The data reveals that a farmer considers more than one crop as relatively important.

(a) Dura

92% of the farmers have indicated that they consider dura to be a very important crop. This is due to the fact that dura is the staple food of the vast majority of the farmers. The government should try to encourage the expansion of the area sown to dura to meet the increasing local demand for this cereal.

Considering that dura is a item of diet in Sudan, and that todote it was mostly grown in rainfed areas with consequent fluctuations in production, it would be worthwhile to encourage the growth of dura at the expense of dukhun. The farmers can make vast economic gains by developing their area as a dependable source of dura in contrast to the rainfed areas.

(b) Dukhun

In contrast to dura only 14% of the farmers consider dukhun to be a very important crop. An equal number (14%) regard it as unimportant while 34% think that it is important. A large number (38%) attach minimal importance to the dukhun crop.

(c) Groundnuts

Of the farmers surveyed 26% think that groundnut production is very important. A small 4% regard it as being important while 28% attach minimal importance to it. A large number (42%) consider groundnut production to be unimportant. In view of the above figures it would be unwise to push for an increase in groundnut cultivation.

(d) Sesame

Although the seeds and oil are consumed locally, it is surprising to find that 48% of the farmers indicate that sesame is not important. However, sesame seed is the second crop of importance in the central rainlands. Rapid expansion took place in its acreage, particularly when the price of dura declined considerably due to the

heavy overall production. Also people realized the profitability of sesame in spite of the difficulties encountered in its cultivation. There are, however, wide fluctuations in its acreage. These have been caused by market conditions as well as by climatic conditions, particularly annual precipitations³. Based on these facts the farmers should be informed of the risks involved in sesame production including the market forces at work.

(e) Sugar

Sugar imports have been steadily increasing although suitable ecological conditions exist in the Sudan for growing sugar cane. 88% of the farmers regard sugar as a very important crop. The sugar import bill reached its highest level in recent years. Therefore, in line with the import substitution strategy, the proposal is to expand sugar cane cultivation in the large irrigated schemes to satisfy the increasing local demand.

11.3. Major Cash Crops

The farmers were also asked to identify which cash crops they cultivate and were given four categories (cotton, sugar, groundnuts and other crops). The results follow:

(a) Cotton

Cotton occupies an extremely important position in the determination of national income and Sudan depends largely on the export receipts from the crop. It has been noted that the average yield for cotton has fluctuated from year to year but recently has shown a consistent trend of decline. Taking into account this factor and limited resources, the farmers are by no means in a position to cultivate cotton as a cash crop.

³ Food and Agriculture Organization (FAO), *Crop Production, Perspective Study of Agricultural Development for the Democratic Republic of the Sudan*, Rome, April 1973, pp. 9-13.

(b) Sugar

There has been an increase in per capita consumption of sugar in Sudan in recent years much in excess of the supply and the deficit is covered by imports. This is explained by the increase in population, income and the development of food industries depending on sugar. However, it was found that due to financial reasons none of the farmers in the scheme cultivate sugar as a cash crop.

(c) Groundnuts

The cultivation of groundnuts under irrigation is not very attractive because of the different technological difficulties involved. An expansion of rainfed groundnuts could be feasible if the high oil prices continue and on the condition that planting and harvesting can be mechanized, otherwise labour shortage would be a bottleneck. Due to this factor, and the limited resources, none of the farmers are in a position to cultivate the crop.

(d) Other crops

Vegetables are the main cash crop which 66% of the farmers cultivate. This is because of their marketability and high turnover.

11.4. Farmer Income

86% of the farmers have stated that their average annual income is more than £S 3000. This group can be considered as the main beneficiaries of the *musharakah* financing. 14% of the farmers said that their earnings from agriculture varied from £S 2000-3000. These farmers can be regarded as lesser beneficiaries from the new system as shown in Table 11.5.

Table. 11.5.
ANNUAL INCOME OF THE FARMER

Income	Percentage
£S 1000 - £S 2000	2.0
£S 2000 - £S 3000	12.0
More than £S 3000	86.0
TOTAL	100.0

Source: Survey finding

The annual income given above does not include any income from livestock or any wages earned outside the farm. There is no information on the latter two sources of income, although they are believed to be very small.

If we consider farmers with an average annual income of more than £S 3000 and compare their ratio among clients of the traditional bank (Agricultural Bank of Sudan) and those with the Islamic bank (Sudanese Islamic Bank) in the area surveyed, we find that the percentage is higher (86%) under the latter than the former (78%). It can be argued either that the introduction of *musharakah* financing has increased the annual income of the farmers, or that the richer farmers are more likely to do business with the Islamic banks. The second assertion is contradicted by the conditions of the farmers in the two schemes before the Bank's establishment. The farmer has apparently gained becoming a partner with the Bank and sharing the profits of the crop with the Bank.

Income from vegetables constitutes almost 94% of a farmer's income from all crops. Moreover, the Bank in order to provide additional income to a rural family, has initiated a new scheme to help the farmers. The family poultry production scheme was introduced, the objective being to assist 31 families in 7 villages. Each family received one battery cage and 96 laying hens from the Bank. The cages and 2944 hens worth a total of £S 137,993, were given to the families without any

guarantee or collateral⁴. The amount was to be paid back in 14 monthly instalments. The Bank also provided feed and drugs to the families at cost. The families pay back £S 113,905 in instalments and towards the cost of feed and drugs as shown in Table 11.6.

Average production per family was 100 dozen eggs per month, with an average income of £S 476.7 per month. Average expenses including instalments, feed and drugs were £S 305.9. So an average profit of £S 170.8 per month per family was achieved. For a poor rural family this profit is reasonable additional income as shown in the Table 11.6.1. At the same time the family paid the cost of the hens and the 14 instalments for the cages from their monthly income.

The deterioration in the economic condition in the rural areas have made 72% of the farmers claim that income from agriculture is not sufficient. Only 28% of them state that income from agriculture is enough to support their families. This is indicative of the fact that poor farmers in the scheme were hit harder than the relatively rich farmers. This phenomenon has forced many farmers to look for off-farm income opportunities to support their families.

An analysis of off-farm income further reveals that, in economic terms, access to an off-farm income does not necessarily reduce the person's involvement in agriculture. On the contrary, in many cases it helps to meet input costs, particularly of hired labour.

Off-farm income derives from a number of sources, especially:

(a) Farm-labour in the farmer's own village, generally undertaken at the same time as work in his own fields. Farmers involved in this activity have a clear need for cash, both to meet consumption needs and to finance their own agricultural activities. The latter is unlikely to involve labour hire as such, but may include costs such as sacks, transport and the cash requirement which, though generally a

⁴ Khaleefa, M. U. and Ibrahim, S. A., *The Experience of SIB in Musharaakah Financing*, Paper presented at the Seminar on Islamic Banking, Jointly Organised by International Association for Islamic Economics, Islamic Foundation and Loughborough University of Technology, July 1988, pp. 32-34.

Table No.11.6.
THE FAMILY POULTRY PRODUCTION SCHEME
IN KHARTOUM NORTH FOR THIRTY ONE FAMILIES
SUDANESE ISLAMIC BANK
Production Costs (£S.)

	Number of Families	Banks' Contribution			Sub-Total (1)	Family's Contribution		Sub-Total (2)	Total cost 1 + 2		Bank's Family Cont %		Average Cost/Cage % 14 Month (A)
		Pullets No.	Price	Cages No.		Monthly Inst	Feed for 14 Months & Manag.				Cont	Cont %	
	5	448.00	13,440.00	5.00	21,000.00	750.00	17,750.00	900.00	18,650.00	39,650.00	52.96	47.4	7,930
	1	96.00	2,880.00	1.00	4,536.00	126.00	3,250.00	180.00	3,430.00	7,966.00	57	43	7,966
	5	480.00	14,400.00	5.00	21,168.00	756.00	17,600.00	900.00	18,500.00	39,668.00	53	46.6	7,934
	5	480.00	14,400.00	5.00	19,964.00	713.00	17,600.00	900.00	18,500.00	38,464.00	52	48	7,693
	1	96.00	2,880.00	1.00	4,755.00	126.00	3,250.00	180.00	3,430.00	8,185.00	58	42	8,185
	6	576.00	17,280.00	6.00	28,530.00	876.00	20,850.00	1,080.00	21,930.00	50,460.00	56.5	43.5	8,410
	5	480.00	14,400.00	5.00	23,775.00	750.00	17,600.00	900.00	18,500.00	42,275.00	56.2	43.8	8,455
	3	288.00	8,640.00	3.00	14,265.00	438.00	10,425.00	540.00	10,965.00	25,230.00	56.5	43.5	8,410
TOTAL	31	2,944.00	88,320.00	31.00	137,993.00	4,535.00	108,325.00	5,580.00	113,905.00	251,898.00			

A. Average cost per cage includes monthly instalment, feed and drugs

Source: Role of SIB in Rural Development in Sudan, paper presented at the seminar on Islamic Banking, Loughborough, July 1988

Table. No.11.6.1.
THE FAMILY POULTRY PRODUCTION SCHEME
IN KHARTOUM NORTH FOR THIRTY ONE FAMILIES
PROFIT & LOSS ACCOUNTS (£S)

Family	Number of Birds	Monthly Production (Dozen eggs)	Monthly Income (£S)	Total Income 14 Month	Total Exp. (£S) (1)	Net Profit or Loss (£S)
1.	96	120.00	522.00	6,600.00	4,466.00	2,134.00
2.	96	122.00	549.00	7,000.00	4,500.00	2,500.00
3.	96	124.00	558.00	7,100.00	4,500.00	2,600.00
4.	96	119.00	536.00	6,670.00	4,500.00	2,170.00
5.	96	121.00	545.00	6,950.00	4,500.00	2,450.00
6.	96	124.00	558.00	7,100.00	4,500.00	2,600.00
7.	96	120.00	530.00	7,420.00	4,520.00	2,900.00
8.	96	122.00	542.00	7,588.00	4,530.00	3,058.00
9.	96	120.00	525.00	7,350.00	4,540.00	2,810.00
10.	96	121.00	510.00	7,140.00	4,535.00	2,605.00
11.	96	118.00	490.00	6,860.00	4,540.00	2,320.00
12.	96	125.00	600.00	8,400.00	4,600.00	3,800.00
13.	96	123.00	570.00	7,980.00	4,600.00	3,380.00
14.	96	118.00	545.00	7,630.00	4,600.00	3,030.00
15.	96	120.00	560.00	7,840.00	4,600.00	3,240.00
16.	96	120.00	560.00	7,840.00	4,600.00	3,240.00
17.	96	110.00	550.00	3,300.00	4,450.00	(1,150.00)
18.	96	125.00	625.00	3,750.00	4,450.00	(750.00)
19.	96	100.00	500.00	4,500.00	4,450.00	50.00
20.	96	110.00	550.00	4,400.00	4,450.00	(50.00)
21.	96	80.00	400.00	3,200.00	4,450.00	(1,750.00)
22.	96	120.00	600.00	4,800.00	4,450.00	350.00
23.	96	120.00	600.00	4,800.00	4,450.00	350.00
24.	96	140.00	700.00	5,600.00	4,450.00	1,500.00
25.	96	125.00	625.00	5,000.00	4,450.00	500.00
26.	96	30.00	150.00	450.00	4,450.00	(4,000.00)
27.	96				3,000.00	(3,000.00)
28.	96	5.00	250.00	750.00	3,200.00	(2,450.00)
29.	96				2,450.00	(2,450.00)
30.	96	10.00	50.00	100.00	2,700.00	(2,600.00)
(A)						
TOTAL	2880	3,012.00	14,300.00	158,118.00	128,481.00	

N.B. Total Expenses (1)=
(1) Instalment per month for Birds and Cages.
(2) Feed Cost. (3) Vet. Drugs Cost.
(-) All figures between brackets indicate loss.
(A) Family No.31 paid in cash.
Information on her returns not available.

Table. No.11.6.1.
THE FAMILY POULTRY PRODUCTION SCHEME
IN KHARTOUM NORTH FOR THIRTY ONE FAMILIES
PROFIT & LOSS ACCOUNTS (£S)

Remarks:

1. Families (1-16) production continued for the whole productive months (14 months) satisfying 60% from the total cost which must be paid in thirty six months.
2. Families (17-18) normal production continued for 6-8 months. After that production stopped due to death of all birds resulting from newcastle disease attack.
3. Family (19) production continued for the whole period but newcastle disease attack lead to 75% loss of birds.
4. Families (20-21) production continued for 6 months from the production period due to newcastle disease resulting in death of all the birds.
5. Families (22-25) production continued for the whole production period but at low output due to feed scarcity.
6. Families (26-30) low or nil production due to birds starvation families' negligence and death of all birds due to newcastle disease attack.

reciprocal activity, represents a cash outlay requirement.

(b) Local commodity collection/ production and sale. Small scale income-generating activities, both skilled and unskilled. This category includes the manufacture and sale of rusk-work, such as mats and rope, furniture, other woodwork, and metalwork. It also covers the collection for sale of wood for construction, firewood, and straw, which is used in roofing and fencing. These activities generally represent "extra" income which does not detract substantially from agricultural labour. Women in particular may carry out weaving of mats and other rusk products while waiting for grain to be milled, and activities such as rope or furniture making may be undertaken after the day's main agricultural work. Furthermore, most of these activities do not occupy the entire year, and in fact may be practiced predominantly outside of the main cultivation cycle.

(c) Local employment and entrepreneurial activities. This category constitutes both the largest and the most widespread source of off-farm income. Shopkeeping, working as a guard, tea vending and charcoal making were amongst the most common occupations. The most remunerative activities, shopkeeping and motor transport, are restricted to those with sufficient capital for the initial investment.

(d) Remittances from relatives in urban or overseas employment provide a significant source of income for farming households in this area. The trend towards overseas migration, particularly to the Gulf States, increased sharply during the 1970's, with the expansion and diversification of the oil-rich economies. Earnings are frequently substantial, and remittance income sometimes provides the capital base upon which both local enterprise and larger-scale, wage-labour oriented farming is based. Livestock, particularly cattle, are also occasionally purchased from remittance income.

The data has revealed one very interesting result. In the past farmers relied on informal sources of credit for the most part but the researcher found that reliance on informal sources, especially the *shail* merchant, has reduced tremendously.

The farmers were asked how they bridge the financing gap. In response 58%

indicated that they are borrowing from their relatives. This implies that the family ties in Sudan are strong and are based on Islamic values of cooperation. The relatively richer farmers will support their poorer brethren by providing them with credit.

In Sudanese society the family is an important unit of social organization. Family connections and obligations regulate many social activities that in Western countries are the function of other institution. Family members have a strong sense of belonging to the family group and feel obliged to defend the family honour, and to be worthy of the family name. These feelings are not limited to the immediate family, but extend to the joint family and the kinship group. While the immediate family is relatively limited in its function and significance, the joint family plays an important role in the life of the individual and the community. Its influence is manifested clearly in all social and economic matters, such as marriages, illnesses, funerals, agricultural activities and mutual aid⁵. However, in recent years, large numbers of the farmers' relatives have immigrated to the Gulf states looking for a job. The savings made abroad resulted in remittances back to the country and were utilised as either a source of investment funds or as lending to the relatives for the agricultural sector.

Moreover, the sources of private funds are the savings of the people. 14% of the farmers revealed that they borrowed from private sources to satisfy their credit requirement. In the underdeveloped countries the main problem is to devise institutional agencies and procedures, both public and private, which promote savings and the smooth flow of funds to where they can do most good, as cheaply and efficiently as possible under conditions suited to the needs of agriculture.

The particular concern here is with the responsibilities of the government in promoting institutional agricultural credit and encouraging the flow of private funds into agriculture. This long-term objective requires the establishment of a suitable economic climate, an appropriate body of law, and suitable specific provisions to

⁵ Gadalla, S. M., *Land Reform in Relation to Social Development in Egypt*, University of Missouri Press, Columbia, U.S.A. 1962, pp. 46-69.

promote the flow of private funds into agricultural credit.

The first question with which the private lender or investor is concerned is the rate of reward which he will get in return for transferring the control of his savings to someone else. He will require a return at least as good as that which he could obtain in using the money himself, or if he lent it for other than agricultural investment or credit. The aim should be to make loans or investment in agricultural credit as attractive as in other areas so that funds can be obtained on comparable terms, and to reduce the margin between these terms and those on which loans are offered to farmers as far as practicable by increased efficiency in management.

Furthermore, only 2% of the surveyed farmers indicated that they borrowed from the banking sector for non-agricultural purposes. This implies that a bank's role is limited and insignificant. Since the Bank under review is an Islamic institution, it needs to inform and educate the farmers about *musharakah* as a new mode of financing.

Surprisingly, it was found that the role of the *shail* system is limited and only 18% of the farmers approached the *shail* merchant for credit. This is indicative of the fact that the farmers, although illiterate, are more aware about the exploitative nature of the old system. In order to further curtail the *shail* system in the rural areas other Islamic banks working in Sudan need to finance more agricultural projects based on *musharakah*.

The farmers were asked about their main source of income. The majority of them (92%) indicated that their main source of income is agriculture. Since we are dealing with the agricultural sector the major source of income would naturally be agricultural activities undertaken by the farmers.

As mentioned earlier, vegetables are a highly marketable product and have been grown in small-holdings in the scheme. The Bank in order to increase farmers' income and their standard of living, has introduced potato production through *musharakah* financing. This was tried in the Shehenab scheme (where the survey was undertaken) and found to be most successful both in respect of production and

of profit.

The incentives applied are those of cost and profit. In respect of the fixed cost incentive, the Bank provided tractors, harrows and water pumps (without these facilities it will be beyond the farmers' resources to embark on potato cultivation since the capital outlay is high) of a total value of £S 241,770. All agriculture inputs (seeds, fertilizer, fuel) and part of the running expenses were provided by the Bank amounting to sum of £S 74,786. No guarantees or collaterals were required from the farmers. The farmer's contribution is land and labour and part of the expenses amounting to £S 30,231. The Bank's and farmers' contributions in costs of production were 71% and 29%, respectively as shown in Table 11.7.

Total potato production was 4645 50-kg. sacks, with an average of 87.6 sacks/-feddan which is a very high yield. Total proceeds of the produce were £S 263,255 as shown in Table 11.7.1.

Net profit was £S 158,237 of which 75% (£S 118,776) went to the farmers and 25% to the Bank (£S 39,592). The farmers percentage profit calculated from their contributions ranged from 93% up to 1239%, and that of the Bank ranged from 2% to 410% as shown in Table 11.7.2.. The average net profit per feddan was £S 2,988 from which the farmer got £S 2,241 and the Bank £S 747. This profit per feddan is very high compared to any profit obtained from any other crop. This is a clear indication that both the Bank and the farmer, as a result of this partnership, achieved a very high and significant profit from the project.

One question put to the farmers was about the means they used to finance their seed input. They were given three alternatives in response. The first alternative was that they financed the purchase of seeds by themselves, the second was that they made use of Bank loans, and third that they had utilised other sources. There responses can be categorised as:

Alternative One

Self-Financing: A large number of farmers (50%) stated that all of the financing for seed inputs was met by themselves. It can be argued that through the intro-

Table No.11.7.
POTATO PRODUCTION OF FOURTEEN FARMERS
IN SHEHENAB SCHEME OF THE SUDANESE ISLAMIC BANK
Production Costs (£S.)

		Banks' Contrib			Farmers' Contrib		Grand		
	Area in Fed.	Irrig. Land Cost Prep. (A)	Seeds	Ferti. (1) Sub- Total	(2) Sub- Total		Total (1 + 2)	Bank's Farmer's Cont.% Cont.%	Ave. Cost per Feddan
	5	1,691.81	-	3,600.00	5,291.81	6,783.00	12,074.81	44	56
	5	1,759.29	-	3,600.00	5,359.29	3,970.00	9,329.29	57	43
	5	1,759.29	-	3,600.00	5,359.29	3,286.00	8,645.29	62	38
	5	1,759.29	-	3,600.00	5,359.29	1,420.00	6,779.29	79	21
	6	4,405.69	(B)	7,200.00	11,605.69	4,302.50	15,908.19	73	27
	4	1,691.79	-	-	1,691.79	3,500.00	5,191.79	33	67
	3	1,691.79	-	1,232.00	3,643.79	1,000.00	4,643.79	78	22
	2	1,692.79	-	1,056.00	3,468.79	-	3,468.79	100	0
	3	1,652.31	-	5,347.00	10,599.31	-	10,599.31	100	0
	3	2,291.79	-	1,450.00	4,641.79	1,500.00	6,141.79	76	24
	3	1,691.79	-	1,813.00	4,584.79	1,470.00	6,054.79	76	24
	3	1,691.79	-	1,160.00	3,571.79	-	3,571.79	100	0
	3	1,691.79	-	2,352.00	4,943.79	1,500.00	6,443.79	77	23
	3	1,759.29	-	1,826.00	4,665.29	1,500.00	6,165.29	76	24
TOTAL	53	27,230.50	-	16,236.00	74,786.50	30,231.50	105,018.00	71	29

A. Water pumps in this project are the property of the Bank
B. Farmer has three pumps due to the long distance from the river bank

Tables No.11.7.1.
POTATO PRODUCTION OF FOURTEEN FARMERS IN SHEHENAB SCHEME
PROFIT AND LOSS ACCOUNTS (£S.)

	Production Costs			Total Proceeds of Produce	Net Profit	Profit Distribution			
	Bank's Cont.	Farmer's Cont.	Total Costs			Farmer's Share 75% Share	Bank's Share 75% Share	Farmer's Share %(A)	Bank's Share%(B)
	5,291.81	6,783.00	12,074.81	30,250.00	18,175.19	13,631.39	4,543.80	200	85
	5,359.29	3,970.00	9,329.29	27,500.00	18,170.71	13,628.03	4,542.68	343	84
	5,359.29	3,286.00	8,645.29	27,280.00	18,643.71	13,976.03	4,658.68	425	86
	5,359.29	1,420.00	6,779.29	30,250.00	23,470.71	17,603.03	5,867.68	1,239	109
	11,605.69	4,302.50	15,908.19	33,000.00	17,091.81	3,991.36	1,330.45	93	11
	1,691.79	3,500.00	5,191.79	21,230.00	16,038.21	20,856.16	6,952.05	595	410
	3,643.79	1,000.00	4,643.79	8,160.00	3,516.21	2,742.16	914.05	274	25
	3,468.79	-	3,468.79	9,450.00	5,981.21	4,485.91	1,495.30	-	43
	10,599.31	-	10,599.31	11,220.00	620.69	608.02	202.67	-	2
	4,641.79	1,500.00	6,141.79	11,000.00	4,858.21	3,643.66	1,214.55	242	26
	4,584.79	1,470.00	6,054.79	15,211.00	9,156.21	6,867.16	2,289.05	467	50
	3,571.79	-	3,571.79	7,095.00	3,523.21	2,642.41	880.80	-	25
	4,943.79	1,500.00	6,443.79	15,125.00	8,681.21	6,510.91	2,170.30	434	43
	4,665.29	1,500.00	6,165.29	16,060.00	9,894.71	7,421.03	2,473.68	494	53
TOTAL	74,786.50	30,231.50	105,018.00	262,831.00	157,813.00	118,607.26	39,535.74		
Ave/Fed			1,979.00	4,967.00	2,988.00	209,955.10	69,985.00		

N.B. (A) Profit is expressed as a % of farmer's contribution.
(B) Profit is expressed as a % of Bank's contribution.

Table No.11.7.2.
POTATO PRODUCTION IN SHEHENAB SCHEME
FOR FOURTEEN FARMERS
Revenue Returns (£S.)

	Area in Fed.	Production 50 Kg Sac/Fedd	Production 50 Kg Sac/Fedd	Sale Price/Sac (£S)	Total Proceeds of Produce (£S)
	5	100	500	60.5	30,250.00
	5	100	500	55.0	27,500.00
	5	99	496	55.0	27,280.00
	5	110	550	55.0	30,250.00
	6	100	600	55.0	33,000.00
	4	96	386	55.0	21,230.00
	3	53	160	51.0	8,160.00
	2	75	150	63.0	9,450.00
	3	73	220	51.0	11,220.00
	3	66	200	55.0	11,000.00
	3	95	287	53.0	15,211.00
	3	43	129	55.0	7,095.00
	3	91	275	55.0	15,125.00
	3	97	292	55.0	16,060.00
TOTAL	53	1,198	4,745	774	262,831.00
Ave/Fedd	4	86	339	55	18,773.64

*Source: Role of SIB in Rural Development in Sudan,
paper presented at the seminar on Islamic Banking,
Loughborough, July 1988, p. 15.*

duction of *musharakah* financing, in which the farmer has become a new partner with the Bank, a profit was made. Some of it was allocated to finance the farmers' family expenses while some was used to finance seed inputs. It is a good sign that the new mode of financing has changed the attitude of the farmer. The Bank can encourage the farmers to save more. For this to occur there are three related requirements: education and financial awareness, the provision of suitable incentives, and also the provision of facilities which conform to the needs and convenience of rural people. An increase in income affects the position not only because there is more from which to save, but also because it reduces the risk of default if new farm practices fail.

The educational aspect is both negative and positive. Negatively, education may be directed to drawing attention to the serious disadvantages of excessive ceremonial expenditure, and changing the social sanctions which now demand such expenditure. This has been attempted in India and Pakistan through co-operative Better Living Societies, the purposes of which have been described as to⁶:

- (a) improve the moral condition of members;
- (b) provide educational assistance to children;
- (c) check extravagance and inculcate habits of thrift;
- (d) reform undesirable social customs;

Such societies have successfully reduced extravagant expenditure, but their coverage has not been sufficient to modify the social pressure towards it to any degree. The experience of Better Living Societies, however, suggests the importance of giving special attention to the matter. The goal can hardly be achieved by compulsion, but it does require conscious effort to promote agreement among groups of people so that there is moral support for establishing limits, through co-operative education and persuasion, and embodying the objective of reduced ceremonial expenditure.

Positive educational measures to bring home the advantages of thrift must be

⁶ Belshaw, H., *Agricultural Credit in Economically Underdeveloped Countries*, FAO Agricultural Studies, No. 46, Rome 1959, pp. 70-95.

related to specific objectives likely to appeal to the farmers. Very often it is the first which is difficult. Units of saving are so small in the rural area that it may not seem worthwhile to save them but, after they have been going on for a while and a sum is accumulated, there is a certain sense of achievement and a realization of the possibilities which savings may open up.

Alternative two

Bank loans: 20% of the farmers revealed that 100% of their seed inputs are financed by loans from the Bank. The reason for the low percentage is justifiable due to the fact that the mode of financing has changed from loan to equity, *musharakah*, whereby the farmer gets all his seed inputs from the Bank through partnership arrangement. For example, the Sudanese Islamic Bank owns its own machinery (tractors, water pumps etc.) and presents its contribution to the partnership in the form of a comprehensive package of inputs and services provided on a real cost basis. The package covers the following⁷ :

- (a) provision of ploughing and irrigation services;
- (b) provision of production inputs such as seeds, fertilizers, bags, etc. at cost price and at farm-gate;
- (c) provision of working capital requirements;
- (d) provision of agricultural extension;
- (e) contribution to provision of storage and marketing and;
- (f) marketing partnership.

⁷ Khaleefa, M. U. and Ibrahim, S. A., op.cit. pp. 16-18.

In return, farmers are expected to contribute the following:

- (i) arable land;
- (ii) part of the working capital requirements (if available);
- (iii) labour for agricultural operations and;
- (iv) management (jointly with the bank).

The farmers however are not obliged to receive all components of the package, but are free to request those inputs and/or services which they require. In effect, SIB has divided its comprehensive *musharakah* package into a number of financing instruments providing smaller packages, which could be combined when farmers wish to do so.

Alternative three

Other sources: The farmers indicated that only 14% of them depend on other sources mainly the *shail* system to finance their seed inputs. This will support the argument that the role of *shail* as an informal source of finance is limited whereas the *musharakah* financing has started to gain momentum.

Until recently, small farmers depended almost exclusively on informal sources of finance. The village trader practicing *shail* (pre-harvest sale of crop), in effect charging exorbitant rates of interest, was the most prominent source.

In 1977-78, the state-owned Agricultural Bank of Sudan (ABS) initiated the first experiment of financing small farmers. It organized agricultural credit and marketing cooperatives, in Um Ruwaba (Kordofan Region), and subsequently attempted to extend the experiment to three other districts. In spite of (high level) pressures to generalize the experiment, ABS has faced serious problems in maintaining the continuity and viability of its operations among small farmers. The factors behind these problems are several and complex, but basically relate to the fact that ABS, in the tradition of conventional banks, extends production credit to farmers and expects a fixed rate of interest irrespective of whether or not crops were a success.

11.5. Agricultural Credit

F. A. Lees and Brooks have noted that organised banking has a poor record in penetrating the economic hinterland of developing countries, in serving rural areas, and in serving small agricultural borrowers in particular^a. In the Sudan agricultural credit suffers from deficiencies often encountered in developing countries. These include a lack of modern sector financial institutions to mobilise and channel credit to individual farmers and tenants, the consequent high cost of a predominantly tradition-oriented credit mechanism, and the inability of farmers and tenants to extricate themselves from an inefficient and costly credit system.

As mentioned in the Chapter Nine, agricultural credit in the Sudan falls into two broad categories, the traditional system of *shail* and the non-traditional or modern credit system. The modern credit system is made up of the commercial banks, the Agricultural Bank of Sudan, and quasi-public bodies such as the Sudan Gezira Board. Many farmers and farmer tenants do not actively seek or have ready access to sources of credit from the modern sector due to a lack of suitable assets to serve as collateral for loans, low risk-bearing capacity and managerial ability, inability to establish effective contact with lending institutions, latent fear of other (modern) credit systems which they have no familiarity with and a simple defence of traditional methods and value systems.

The farmers were asked if they had opened a deposit account with a bank. 38% of the farmers stated that they had opened a deposit account with an Islamic bank whereas 62% of them did not. This can be attributed to the fact that the farmers are less aware about an Islamic bank's mode of financing in agriculture. On the other hand, their capital formation is low and difficult to estimate. It can be done either by family budget studies in which all receipts and expenditures are recorded, or alternatively, by asking about expenditure on capital goods. The latter method is usually more successful as major items of expenditure are more easily remembered. This method has been used by Habibullah in estimating private capital formation in

^a Lees, F. A. and Brooks, H. C., *The Economic and Political Development of the Sudan*, The Macmillan Press Ltd, London, 1977, pp. 84-95.

rural areas of what is now Bangladesh, in the monetized sector⁹. In this study the rural capital formation in two of the five unions surveyed was negative and in the rest it was negligible. The main reasons were the absence of institutional facilities for credit, high rates of interest charged by private lenders and the low income level of the rural masses. Lack of savings appeared to be the main cause of low capital formation. Habibullah found that 80% of the farm families surveyed had no surplus for the period covered by the survey.

The lack of savings is due, on the one hand, to low income levels and on the other, to the absence of institutional facilities for savings. The Bank has to encourage the farmer to increase their production and income so that additional savings can in fact be possible.

It is generally acknowledged that improved credit, agricultural extension, and other development measures must be antecedent to any significant increase in rural savings. But there are two other requirements both in respect of current savings and of the increased amounts made possible by successful development programmes. The first is to encourage farmers to put savings to productive use, either on their own farms or by lending to others¹⁰. The second is to mobilize such financial savings as are made into larger aggregates so that they can be used more effectively. Under the best of conditions the units of savings will be so small and scattered that they contribute little to productive power; but if aggregated in financial institutions by way of deposits or other types of financial investment, a sizeable volume of credit becomes possible which can be directed to further agricultural programmes.

The farmers were given three reasons to explain their decision to open an account with the Sudanese Islamic Bank. 36% of the farmers indicated that savings are safer in the Bank whereas 64% of them did not reply.

The second given reason was that they get a return on savings held with the Bank. Surprisingly none of the farmers surveyed gave this as their reason for opening

⁹ Habibullah, M., *Some Aspects of Rural Capital Formation in East-Pakistan*, Bureau of Economic Research, Dacca University, 1963, pp. 90-95.

¹⁰ Belshaw, H. op.cit. p. 50.

an account.

The third reason identified was that they had opened the account because the Bank offers a loan to its account holders. 90% (overwhelming majority) did not respond but 18% stated that the Bank has offered them a loan because they had opened an account. In fact the main reason for the low percentage of respondents is due to the fact that the Bank's operations, in the two schemes under study, are based on *musharakah* financing. The success of SIB in *musharakah* financing operations has prompted the management of the Bank to increase the respective shares of *musharakah* instruments in the Bank's portfolio from 42.70% in 1406H to 60.90% in 1407H.

11.6. The Relation of the Farmer with Financial Institutions

The farmers were asked if they had dealt with banks before. 58% of them indicated that they had not dealt with a bank, whereas 42% of the farmers had done so. This suggests that the banking system is a new development in Sudan.

The majority of the farmers indicated that they had not dealt with a bank before and they represent 52% of the sample, the remaining had. Moreover, 2% had started to deal with the Bank between 1970-1974. The remaining (46%) of farmers have approached the Islamic bank after 1975.

These figures suggest that the Sudanese Islamic Bank has succeeded in penetrating the rural areas whereas in the recent past the Agricultural Bank of Sudan had failed to do so. The behaviour of the ABS had encouraged the small farmers to deal with the informal sector through the *shail* merchant for a number of reasons. The most important one was that it belongs to and has been part of the rural economy for centuries.

Through long experience, informal lenders have adapted their systems to rural conditions and culture and are still doing so. In keeping with the environment, they operate without costly buildings, staff, and paperwork¹¹. Because of proximity, they have knowledge of the creditworthiness of borrowers, which minimizes the cost of assembling information. They are accessible at all times and keep procedures simple to accommodate and reduce transaction costs of their customers. They survive by combining lending with shopkeeping, trade, grain milling and processing, taking profits from and distributing risks over each activity.

The demand for funds, in relation to the supply, is larger because the average borrower in the informal money market has a very low income and therefore has no surplus funds to finance his business operations. The majority of the cultivating tenants - one of the most important groups of potential borrowers - have to borrow money not only for investment in land, cattle, etc., and for working capital to make purchases of seeds and fertilizers, but also for their minimum basic necessities of food, shelter, and clothing¹².

On the supply side, there is a general shortage of capital in underdeveloped countries and an inadequate level of domestic savings. Also, the small amount of domestic savings is not channeled effectively into the informal money market because of the absence of proper financial and credit institutions which not only would integrate the formal and informal money markets, but also would facilitate the mobilization of savings in the rural areas.

The difference in the levels of interest rates between the formal and informal money markets stems partly from the basic difference between the sources of supply of funds in the two markets. In the formal money market, facilities for the expansion of credit are open to the commercial banks, which have the use of funds belonging to depositors. These banks are therefore able to charge relatively low rates of

¹¹ Bouman, F. J. A. and Houtman, R., 'Pawnbroking as an Instrument of Rural Banking in the Third World', *Economic Development and Cultural Change*, The University of Chicago Press, Vol. 37, No. 1, October 1988, pp. 69-89.

¹² Wai, T., 'Interest Rates Outside the Organized Money Markets of Underdeveloped Countries', *IMF Staff Papers*, Vol. VI, 1957-58, pp. 105-109.

interest and yet make satisfactory profits for the shareholders. On the other hand, moneylenders in an informal money market have little influence on the supply of funds at their disposal and, furthermore, their supply price tends to be influenced by the alternative uses to which their funds can be put.

Bankers, officials of cooperatives, rural development planners, and project designers have often voiced the opinion that informal lenders should be eliminated from the rural scene and replaced by formal financial institutions. Most critics, however, tend to be against interest and base their arguments on moral and religious grounds.

In order for the Sudanese Islamic Bank to build a good relationship with its new customers (small farmers), certain incentives have to be created for the extension officer of the Bank to enable him to convey the message to the rural communities on the role of the Bank in *musharakah* financing of small farmers.

As the extension officer of the RDD has a unique task, the Bank's management should consider applying *musharakah* financing not only to the small farmer, but also to their staff who work with the farmers in the fields, in order to give them more incentives to stay on in the rural area and with the Bank as well. This requires that more financial rewards (in terms of payment and allowances) be given to the extension worker designated to live and work in rural areas. Their chances of promotion should be increased, their services, if successful, should be recognized and acknowledged.

It was indeed, quite clear that the available knowledge about the human and physical resources in the rural areas of Sudan had always fallen short of what was needed to carry any sound extension programme very far. The increasing complexity of rural agriculture and the problems which arose in adapting it to modern technology have brought forward the need for incorporating in the centre of any extension programme area proper facilities of adaptive research and training. The availability of extension workers knowledgeable both in farmers' ways of cultivation and in efficient extension teaching methods is a basic requirement to sound

extension work in rural communities.

The farmers' relation with the Bank is weak if not non-existent and the majority of them (100%) responded that they did not approach more than one bank for credit. The Sudanese Islamic Bank has to promote literacy and formal education among the farmer. This task is obviously of major importance in providing means of communication and promoting the spread of knowledge on the new mode of Islamic financing and in increasing general receptivity to social change. It is not a coincidence, for example, that Japan is foremost among countries in Asia both in formal education and literacy in rural areas, and in farm techniques and the success of co-operative societies.

Experience with agricultural and rural development, especially since the Second World War, has revealed that the extent to which farmers possess the knowledge, skills and favourable attitudes toward technological advances that can increase production, is one of the most important factors accounting for success or failure of many development programmes. Therefore, agricultural development requires many inputs.

Some of these inputs must be regulated by law, hence the need for institutions to perform certain regulatory functions for agricultural development. Other inputs require making service provisions, public or private, that would ensure their proper distribution; while others are investigatory in nature and require research institutions for their solution¹³. One of the inputs for agricultural development is educational orientation. It has to do with helping rural people learn about new things related to agriculture and rural life. Agricultural extension, if it is to be effective, must deal with this aspect only. Extension workers must not assume any regulatory duties, nor should they be made directly responsible for service functions. They are agents of change and one of the most essential prerequisites for the effective execution of this role is the prevalence of mutual trust and confidence

¹³ Douglass, M. A., 'Agricultural Extension: Principles and Constraints', *Agriculture & Development in Western Asia*, Joint Publication of the United Nations Economic and Social Commission for Western Asia and the Food and Agriculture Organization, December 1986, No. 9, pp. 31-35.

between the agent (extension worker) and the client system (rural families). Being responsible for regulatory and/or direct service functions tends to put the extension worker in a position where rural people look upon him with doubt and suspicion. Consequently, he will not be able to affect the desired changes of behaviour. Therefore, it is best to delegate the regulatory and service functions (which are necessary and important) to other agencies and leave the extension programme to assume only the educational task so that its workers can develop the reputation of being informal rural "teachers" whose relationship with the entire community is based on mutual trust and confidence.

11.7. Problems Facing the Farmers

The Sudanese Islamic Bank provides finance for marketing services to small farmers by paying half of the price of the crop at harvest time. Thus it becomes a partner with the farmer in crop production. Both parties jointly control the shared crop. When the crop is eventually sold profits are shared according to a fixed ratio, after a management fee is paid to the farmer. This contract avoids selling at low prices at the time of harvest. These services, however, are not sufficient to satisfy the farmer needs. The majority of the farmers (80%) complained that the Bank did not help them in marketing and storing their crops, whereas only 20% of them said that the Bank had helped them.

The farmers complaint is justifiable due to the fact that vegetables and fruit are highly perishable crops. Most of them can only be stored for a very short period of time and to do so they require special types of storage facilities, of which there are not enough at present in the scheme area. Moreover, they require high investment per unit area both in capital and labour.

The farmers were asked to give their opinions as regards the following problems faced by them:

(a) Irrigation problems.

(b) Marketing problems.

(c) Storing problems.

(a) Irrigation problems:

The Bank got involved as a partner in providing a comprehensive package of inputs and services. A major feature of the scheme is to vary the package to match the requirements of the farmer. The Bank provides irrigation services, land development, inputs, working capital requirements and marketing facilities. Therefore, the role of the Bank in providing irrigation facilities to the farmer is relatively satisfactory as pointed out by 42% of the total. However, 58% of those surveyed state that irrigation is still a problem and the Bank has to resolve it.

(b) Marketing problems:

Marketing is an essential service for the viability of the agricultural sector. It provides the channels whereby agricultural products are distributed from producers to consumers, and it regulates the flow of these products in order to avoid both temporary shortages and surpluses which can only be disposed of by a sharp fall in prices. The rapid growth, over the last ten years, in Sudan's production of vegetables has brought marketing to the forefront of the problems facing both farmers and agricultural development bodies.

Farmers produce farm products for their families and for community use. The surplus (if any) must be sold to produce cash and earnings for the farmers. It is the marketing system that provides channels for the sale of the surplus farm products. 46% of the farmers indicated that the Bank has helped them in marketing their crops whereas 54% of them stated that the Bank did not help them.

The Sudanese Islamic Bank gives more emphasis in its operations on crop marketing realizing its importance to small farmers. Being in dire need of cash, small

farmers in Sudan have largely tended to sell their produce immediately after harvest. Prices fetched by crops at harvest time, however, are normally very low compared to prices which prevail a few months later. The poverty of small farmers thus tends to be a kind of a vicious circle that constrains the producers from waiting until prices improve. For this reason the Bank seeks to help small farmers by continuing in a partnership through the marketing stages as well. Instead of selling crops at harvest, the Bank pays the farmers 50% of the price prevailing at harvest time, thereby becoming a partner in the crop. The crop is stored under joint control by both the farmer and the Bank. When prices improve, the crop is sold. Of the profits made (i.e. amounts additional to harvest price and incurred storage expenses), 50% would accrue to the farmer in return for management while the other 50% is divided equally between the two partners according to their equity shares¹⁴. For example, if the harvest price is £S 100, storing costs £S 10, and sale price is £S 160, the farmer would end up receiving a total of £S 137.5 instead of the harvest price of £S 100 and the Bank would receive £S 12.5 as its share in the profits.

In general, the role of the Bank in marketing the farmer crops is relatively good (though more help is needed) and it is a good sign that the new institution has started to realize the important factor of marketing to the small farmer, not only for him to generate income to support his family, but also to the national economy. It may be noted that the marketing problem has been one of the main bottleneck hindering agricultural progress in Sudan.

Marketing services are very vital for the Bank as well as the farmers and the main problem confronting the Bank is the lack of basic infrastructure and support facilities, making its operations more time-consuming, expensive and risky. Transport costs double and triple when truck movements are over unpredictable earth roads as against reliable tarmac. When means of information and communication are lacking, the prices offered for produce will be lower to allow for uncertain conditions of resale.

There are many areas where the government can support the Bank, as well as

¹⁴ Khaleefa, M. U. and Ibrahim, S. E. A., op.cit. pp. 19-20.

other indigenous private enterprises, and enable them to contribute more effectively to the growth of the economy.

Provision of the basic infrastructure:

Without the provision of basic infrastructure and stable conditions of sale the marketing service is continually handicapped in moving goods from where they are produced to where they are most wanted for consumption. Help from the government begins with the construction of roads, railways for general use; and maintaining them in good working order. A legal framework of protection to buyers and sellers against fraud and for enforcement of contracts is a general requirement of ongoing marketing operations. Access to motor transport is also crucial for the agricultural marketing service as is priority in the allocation of foreign exchange to imports of commercial transport vehicles, and their spare parts.

Access to finance:

Without some working capital or credit, marketing will be restricted to the Bank selling farmers' own production to consumers. Access to capital has been so strategic in West Africa, for example, that many farmers have used the proceeds of cocoa sales to buy some other seasonal produce and benefit from the returns from holding it to sell again¹⁵.

A favourable and consistent policy position of government:

This responsibility is essential. In some socialist economies private wholesaling is officially illegal. If it happens at all it is because local authorities close their eyes where it provides a useful service not available through the official system. In various mixed economies private traders incur unnecessary costs to overcome harassment by local officials; they face the risks of arbitrary seizures of stocks and unrealistic price fixing.

A clear government recognition of the important role of the Bank and other private enterprises in the overall marketing system is needed. A dialogue between

¹⁵ Abbott, J. C., *Agricultural Marketing Enterprises for the Developing World*, Cambridge University Press 1987, pp. 60-62.

the government and the traders also needs to be initiated to discuss relevant policies and organizing specific programmes of assistance.

(c) Storing Problem:

Storage is essential to conserve agricultural commodities, particularly those which are perishable. Crop prices have unusually wide seasonal fluctuations, with the low point at harvest time. Credit institutions, like the Agricultural Bank of Sudan, usually require repayment of their loans at harvest time since the farmer then has the most cash. This is also the farmer's custom when he intends repayment; both he and the lenders know that it is easier for him at this time. But it is often possible for a farmer to get 20 or 30% more value for the same quantity by waiting two or three months after harvest to sell his crop, and still more later on. Such increments to a small farmer's income would frequently exceed the probable gains from available technical innovations, and may be less demanding of skill. So if credits extended by the Bank are intended to augment the small farmer's income, why should they not encourage rather than inhibit him from holding his crop for a price increase? And would not loans to provide him with storage capacity, where a loan is needed, present an easy way for the bank to show quick results from its endeavours?

To overcome the storage problem, the Sudanese Islamic Bank has realized that farmers selling their crops at harvest always get low prices. Therefore, the Bank (through its *musharakah* financing arrangement) in its efforts to maximize farmer's income has given the farmer 50% of the prevailing prices at harvest. The crops are stored under dual control. Then the crop is sold later when prices are high. From the net profit the farmer gets 50% for management and the remaining profit is divided equally between the bank and the farmer.

50% of the farmers indicated that the Bank has provided them with cold storage facilities for their perishable crops and it is therefore not considered to be a problem. The remaining (50%) stated that the storage is a problem and has to be tackled.

On the balance the Bank has relatively succeeded in providing storage facilities. A positive attribute has been the high utilization by the local market which acts

as an incentive to the farmer to produce more for family consumption and for sale. The farmer in return gains bargaining power which may contribute to increased prices of his products.

The above facts clearly indicate that the Sudanese Islamic Bank through its *musharakah* financing has devoted more time and effort to help the small farmer through storing and marketing his crops. Such incentive has prevented the farmer from being exploited by the *shail* system which in the case of a traditional bank (the Agricultural Bank of Sudan) can not be avoided. Efficiency in the marketing of the crops has resulted in higher income among small farmers, low costs to consumers and a continuous improvement in the volume of local markets. Bank intervention in marketing has also created the necessary climate for market expansion. An improvement in storage facilities and the availability of storage credit would afford greater flexibility in the movement of produce. This has led to more price stability and resulted in increased returns to farmers.

In Chapter Nine the analysis attempted to demonstrate how the traditional banks (which base its operations on debt financing like the ABS) have indirectly encouraged the farmer to deal with the exploitative *shail* system. The reason is that under debt financing schemes the bank fails to provide the farmer with credit facilities, not only for production, but also for marketing. Thus the traditional banks have driven more farmers deeper in debt to the *shail* system. It may be worthwhile here to attempt an understanding of how the system works.

The *shail* is a powerful system of pledging a growing crop in return for a loan. The farmer loses the power to bargain while the traders buy the crop at prices even lower than the lowest seasonal price which prevails at harvest time. The loan is disbursed in the form of cash or commodities which are invariably grossly overcharged.

The farmers are often compelled to accept such terms and conditions because of seasonal deficiencies of foodstuff¹⁶.

The traders try to get a firm grip on the farmer. This is achieved when the future harvest has been pledged completely leaving the farmer no residues to engage in another debt relation. In this case the oligopoly which preexisted by virtue of the prevailing market structures, develops into a monopoly of the trader. The farmer is hardly able to escape the debt trap and thus is obliged to pay back the loan several times without getting rid of the duties. The trader/moneylender can pocket a double monopoly rent acting as sole supplier and market outlet for his dependent farmers. He reaps interest at the rate of 300 to 400% p.a. out of the *shail*. This profit does not include the money gained by overcharging for much needed commodities.

The Sudanese Islamic Bank has helped the small farmers in marketing and storing their crops through partnership financing. However there is still a demand for a complete marketing system in which a farmer can sell his crops at reasonable price.

11.8. Type of Bank's Credit and Facilities

The farmers were asked about incentives the Bank provides. Three items were identified to which the farmers responded:

(a) Purchases of agricultural inputs:

44% of the farmers indicated that the Bank has provided them with agricultural inputs such as seeds, insecticides and fertilizer to be used in their farms whereas 56% of them stated that the Bank did not assist them enough in providing agricultural inputs.

The majority of the farmers grow vegetables which are high-value crops and require productive, well-drained, level soils. High rates of commercial fertilizer, insecticides and weed control measures are also required. Harvesting, handling, distributing, and marketing costs are high because the crops are perishable and

¹⁶ Wohlmuth, K. and Oesterdiekhoff, P. (eds.), *The Development Perspectives of the Democratic Republic of Sudan, The Limits of the Breadbasket Strategy*, Weltforum Verlag, West Germany, 1983, p. 145.

labour requirements are usually large. An adequate water supply is one of the prime requirements for growing vegetable crops successfully. Vegetable production demands a large outlay of capital, and, if water is not available at the right time, farmers will face many problems. It seems that the Bank has so far no problems of watering the two schemes. The Bank through RDD should find out why farmers are complaining about insufficient agricultural inputs. The Bank can and should invite some representatives of the farmers to discuss this problem and others in order to find a solution.

(b) Marketing of crops:

It is clear that there are several difficulties facing the small farmers in marketing their crops. Though the Bank has started to market their crops through *musharakah* financing, it seems that its impact is still limited and the farmers think that the incentives provided are inadequate. This fact was underlined by the majority of farmers (88%) who indicated that the Bank did not provide them with enough incentives to enter into a marketing *musharakah*. The remaining (12%) of them stated that the Banks' arrangement for marketing are adequate. The Bank should play a more active role to find ways and means to resolve this problem.

The farmers were also asked about the existing marketing facilities. The majority of the farmers (78%) thought that these were satisfactory whereas 22% of them asserted that marketing facilities were not satisfactory. The figures indicate that generally the marketing of crops by the Bank under the *musharakah* financing system is beneficial to the farmer. It improves the income of the small farmer and prevents their exploitation by the *shail* merchant. There remains however some room for improvement.

(c) Storing the crops:

Although the Bank prepares the land for the farmers, (by supplying tractor services at cost) and provides inputs, transportation, storage and part of capital (through *musharakah* financing arrangement), its impact in providing storage facilities is still limited according to the farmers point of view.

86% of the farmers complained that the Bank did not provide them with the storage facilities as an incentive whereas only 14% of them indicated that the Bank provided them with such facilities. The Bank should focus more attention to the importance of storage as the majority of farmers produce vegetables which are perishable.

As stated earlier and shown in Table 11.8. as many as 54% of the farmers had not dealt with the Bank for their credit needs. These farmers thought either that the terms of Bank's credit were not attractive enough or that borrowing from other sources such as relatives is much simpler and straightforward. 4% of the farmers had received credit for a period of less than six months. Almost 34% had had credit terms extending over one year and a small 8% had credit extended over a larger period.

Table 11.8.
CREDIT TERMS EXTENDED BY THE BANK

Credit Term	Percentage
None	54.0
Under six months	4.0
Six months - one year	34.0
Over one year	8.0
TOTAL	100.0

Source: Survey Finding

The overall picture implies that the Bank's credit policy is concentrated on financing projects of a short-term nature rather than focussing on the medium or long-term. It is a reasonable assumption that in most countries primary importance, in terms of both the amount and its proportion of the total, is attached to a better provision of short-term credit extending over a crop season. The labour of the farmer and his family is usually the main element in the improvement of individual

farms, so that much of the credit needed for this purpose may be indistinguishable from that needed for working expenses. However when materials are required the credit may have to be extended for longer periods.

The farmers were asked if they required more credit facilities. 94% responded positively. This is indicative of the fact that the demand for credit is very high because it is an essential input into the farming system.

There are two types of farmers who may need credit: (1) those who have started developing their farms without credit but no longer find their savings adequate to defray rising development costs; and (2) those who have had little chance to acquire for themselves the resources required to escape from the bind of subsistence farming but have the opportunities and will to do so provided credit is made available. The first are likely to make the most productive use of credit provided their incentive to save is not impaired. The latter can be helped only at considerable risk because the potential for higher output is likely to be less certain and capacity for repayment correspondingly less¹⁷. Extension of credit to this type of farmer must be undertaken if the fruits of development are to be widely shared, but it will need to be done in a more cautious and tentative way if serious losses are to be avoided. Therefore, the Bank should strive for an intimate link between agricultural extension and credit. The degree to which the extension service should get involved in the administration of credit will differ with the circumstances.

¹⁷ De Wilde, J. C., *Experience With Agricultural Development in Tropical Africa*, Vol.1, The Synthesis, Published for the International Bank for Reconstruction and Development by The Johns Hopkins Press, Maryland, U.S.A., 1967, p. 200.

The farmers were asked whether they agreed with following four possible reasons for more credit:

- (a) to introduce new crops.
- (b) to undertake farm improvement (e.g. new irrigation work);
- (c) for family reasons;
- (d) to pay off previous debt.

54% of the farmers were interested in introducing new crops. Probably they have realized the inherent danger in relying on a single crop. They have to be told about crops which are adaptable to the physical environment and also offer good prospects of a return on the investment made.

72% of the farmers were positive about the need for credit for farm development. In this area the Bank already provides irrigation facilities through the *musagah* financing arrangement. The Bank undertakes the provision of irrigation pumps and accessories, installs them in the farm and authorizes their operation by the farmer. The farmer pays a proportion of his produce and the SIB is solely responsible for maintenance¹⁸. The *musagah* instrument has options of additional financing (over and above irrigation) for other inputs such as seeds, fertilizers and pesticides.

Only 2% of the farmers agreed with the fourth reason. It may be argued that the *musharakah* system has reduced debt financing and that the farmer is relatively well off as compared to the traditional informal system.

10% of the farmers said that they needed further credit for family reasons. It may be noted that the Bank does give consumption loans through its *qard hasanah* scheme. These 10% were asked to justify their need for credit on the basis of the following options:

- (a) to finance education.
- (b) to cover marriage expenses.

¹⁸ Khaleefa, M. U. and Ibrahim, S E. A., op.cit. p. 18.

(c) to pay hospital (health) bills.

Although 6% of the total number of farmers surveyed have identified the need to finance education the medium to long term economic rewards are enormous. Experience and research show that educated farmers are more productive and receptive to new ideas and improved technology. The Bank can institute a programme of rural education which combines theory and practice.

Only 2% of the farmers said that they needed further credit to cover expenses of marriage. This number is encouragingly low, however it has to be recognised that each farmer is bound by a series of socio-economic obligations to fellow farmers and close relatives. Both gifts and hospitality are obligatory if his status in the village hierarchy is to be maintained¹⁹.

With the third reason again 2% of the farmers agreed. In general, all basic services (including health care) are provided free by the government. However often such services are not enough and need to be supplemented.

The above results clearly indicate that the learning process among the farmers is underway. A farmer is much more highly motivated under the new *musharakah* system than he was under the traditional system. He also has begun to realize the benefits in diversifying the production to more than one crop.

These positive developments require a close monitoring and continuing evaluation by the Bank which should be a task for its rural development department. Monitoring and evaluation (M&E) is basically seen as a tool of project management for effective implementation and better planning and is indeed vital for a young institution like the Bank. Therefore RDD should have a measure of independence and enhanced responsibility so that it can conduct its daily business more efficiently and effectively.

The primary reasons for monitoring rural development projects (like the one under review) are:

¹⁹ Hill, L. G., 'Hababin Village Economy', *Sudan Notes and Records*, Vol. XLIX, Khartoum, 1968, pp. 58-70.

- (1) to keep track of project progress;
- (2) to provide a feedback to project management on the achievement of project objectives;
- (3) to serve as a "warning" mechanism for project management; and
- (4) to help prevent or solve problems encountered during project implementation²⁰.

Furthermore, the Rural Development Department should, through monitoring and evaluation (M&E) of these projects, emphasise the effects (such as increases in fertilizer use, yield increase, improved credit supply) and impacts (income increase, improved nutritional status), which are distinct from project inputs (capital, manpower, equipment) and outputs (area irrigated, tubewells installed), on the small farmers²¹. Under an adequate M&E system of *musharakah* financing, one must undertake periodic analysis of project outputs and effects, as well as of the impact on the socio-economic conditions of the small farmer. This is necessary to ensure that the project is on the right track and has optimally achieved its essential objectives.

The Bank should thus set up a procedure of mid-term evaluation (MTE) in order to establish the basis for assessing the impact of *musharakah* financing and draw lessons for (i) project design and implementation; (ii) design of M&E systems as an effective tool for project management and beneficiary participation and (iii) developing practical and cost-effective methods for impact assessment.

According to the IFAD annual report, the MTEs have found that the monitoring and evaluation arrangements at various levels have been slow in developing and demonstrating their usefulness to project management. This situation can be attributed to a number of reasons, such as a lack of trained monitoring and evaluation staff, lack of training facilities for new staff, and difficulties in retaining trained staff in the absence of good career development prospects. Therefore, the Bank

²⁰ World Bank Staff Working paper No. 439, *Monitoring Rural Development in East Asia*, October 1980, pp. 5-8.

²¹ International Fund For Agricultural Development, annual report, Rome, 1984, pp. 38-39.

should pay more attention through its RDD to the supervision of monitoring and evaluation of *musharakah* financing during implementation.

Since the Bank is a newly established institution it may be beneficial for it to collaborate with other institutions like the Agricultural Bank of Sudan in undertaking monitoring and evaluation and in developing a training programme for its staff in order to build up a good cadre for the future.

11.9. The Advantages of Sudanese Islamic Bank Credit

The farmers were asked if there were advantages in receiving Sudanese Islamic Bank credit facilities. 82% of the farmers responded positively whereas 18% disagreed. This supports the argument that the farmer thinks that the new system is fair and just.

G. Standing has demonstrated that under the traditional system of financing, the farmers have had to pay rent for use of a landlord's mill, or buy provisions from the landlord's "company store" at monopolistic prices, or having been forced into debt have been obliged to sell crops to the landlord at harvest times when prices were relatively low and buy back some proportion later when prices had risen²².

In the informal system the farmer has to provide different types of collateral security. For example, as noted by K. Sarap in his study of rural credit in India, it is easy to get a loan in case of marketable collateral (such as gold, land, etc.). In the absence of such assets, borrowers either would borrow less or resort to inferior collaterals such as utensils, standing crops, or future labour services²³. The lender may accept these items (especially the latter) as collateral security on the condition that the security will be sold to the lender at his call. Alternatively the borrower may also attempt to move to collateral substitutes. One such substitute is a third party guarantee. The third party may have a relationship with the lender other than that of a borrowing transaction. In such triangular relationships the lender

²² Standing, G., 'Migration and Modes of Exploitation: Social Origins of Immobility and Mobility', *The Journal of Peasant Studies*, Vol. 8, No. 2, January 1981, p. 179.

²³ Sarap, K., 'Transactions in Rural Credit Markets in Western Orissa, India', *The Journal of Peasant Studies*, Vol. 15, No. 1, October 1987, p. 93.

can minimise default on loans.

Another collateral substitute is the threat of loss of future borrowing opportunity for the poorer households or loss of social status in the case of others. In a small and immobile rural community the news of wilful default by borrowers can be quickly transmitted to most of the potential lenders²⁴. Furthermore, the lender and borrowers may have a variety of social relationships among themselves through which the lender can exercise some indirect control over the borrowers. Lastly, the current lender may be the only reliable and dependable source of credit for the borrower so that he may not like to forego this source of loans.

The partnership financing will have an effect on morale and quality of work that is generated by a more positive perception of the workplace and a greater feeling of responsibility by workers as well as by their material motivation to enhance earnings which are linked directly to performance. Since the traditional adversarial relationship between farmer and the bank is replaced by a more cooperative atmosphere of joint welfare and benefit, the existing pressure is towards better work rather than towards shirking. Another advantage of the new system is the superior communication channels resulting from a more participatory environment which can help eliminate organizational inefficiencies that farmers have no incentive to disclose in a fixed-wage system.

F. Fitzroy and K. Kraft found in their study quite strong evidence that profit-sharing and worker's capital-ownership are associated with greater profitability and productivity²⁵. Other broad findings were that (a) profit-sharing usually has a positive productivity effect, (b) the effect of participation is usually positive or insignificant, and (c) the effect of capital ownership is usually insignificant but occasionally positive²⁶. Consequently, if higher productivity is the goal, producer

²⁴ Binswanger, Hans and P. Rosenzweig, 'Behavioural and Material Determinants of Production Relations in Agriculture', *The Journal of Development Studies*, Vol.22, No.3, April 1986, pp. 501-539.

²⁵ Fitzroy, F. R. and K. Kraft, 'Profitability and Profit-Sharing', *The Journal of Industrial Economics*, Vol. XXXV, December 1986, No. 2, pp. 113-130.

²⁶ Jones, D. and J. Svejnar, 'Participation, Profit Sharing, Worker Ownership and Efficiency in Italian Producer Cooperatives', *Economica*, Vol. 52, November 1985, pp. 449-465.

cooperatives ought to provide for substantial participation by workers in surplus, in decision-making and in individual ownership.

The farmers were asked to consider the following three advantages in receiving the Sudanese Islamic Bank credit facilities. These were:

- (a) Cheaper than loans.
- (b) No collateral needed.
- (c) Sharing of risk.

72% of the farmers agreed with the first statement. The remaining (28%) thought that the credit extended by the bank is still expensive.

76% of the farmers agreed that the absence of collateral is an advantage. One cannot assess the merits of Islamic banking without analysing the nature of security which the farmer has to provide to a traditional bank in order to get a credit.

Generally, apart from land, the farmers' tangible assets are few. He may possess collateral in the form of treasures, an ox, and a few implements. The assets of tenants are usually even fewer.

Certain other conditions affect the position from the point of view of the lender. Productive capacity is dependent on the ability and integrity of the borrower as well as on the size and fertility of the holding and access to markets. A loan may be designed for production but used for some other purpose. The large number of small farmer holdings scattered over wide areas, and their remoteness, may make it difficult to assess individual productive potential and the fertility of the soil, or supervise the use of loans. The problem is enhanced for the borrower, especially if he is illiterate, because he has difficulty in preparing his case. Since repayment capacity is dependent on the returns from cash crops, an important factor in the situation is the proportion of production devoted to subsistence. But an increase in production may go into subsistence rather than into cash crops, and there will be the temptation to spend additional cash income²⁷.

²⁷ Belshaw, H. Op.cit. pp. 30-32.

The use of land for security is often beset with other difficulties. The importance which the farmer attaches to economic security and the perpetuation of the family may make him reluctant to pledge it except under duress such as may result from personal misfortune, or social pressure to incur ceremonial expenditure. But, in addition, the title to land may not be clear, or there may be a number of owners of fragmented pieces. For land to be a satisfactory form of security it may be necessary to undertake surveys to determine boundaries, provide for simple forms of registration of ownership and transfer, consolidate fragmented holdings, and even revise the laws relating to inheritance to prevent fragmentation from recurring.

The implications for agricultural credit and of problems of security go very far. It is natural for a traditional credit institution to attach great importance to "credit worthiness" in the sense of the existence of tangible assets which can be sold without much trouble or risk of loss. If, however, there is insistence on tangible assets, the large farmer who has more assets of all sorts, more cash income, and usually greater ability in presenting his case, will be at a great advantage. Credit then tends to be rationed not in terms of needs or of the prospective net increments to production, but of existing wealth and income. The smaller farmer then has to rely on the moneylender or *shail* merchant who is less particular about security and more concerned with the economic power which can be obtained, and who has a more intimate knowledge of the borrower.

Whereas in *musharakah* financing, the Banks' participation on the project financed starts at the early stages of the project, that is when the project is initially studied, and at the implementation and follow up levels. The Bank has to know every detail concerning the project it finances and has to be sure that it is a profitable venture. Because there is no collateral, the Bank must vigilently monitor the investment for the success of *musharakah* financing.

70% of the farmers thought that the Islamic Bank is sharing the risk with them whereas only 30% of them disagreed. The higher percentage (70%) of positive response by the small and poor farmers is a good indication that the profit-loss-sharing system is here to stay. It has proved to be workable and successful even

in the agricultural sector, which many development bankers think is risky and any investment should be minimised. Moreover, the sharing system has extended a sense of responsibility not only to the Bank but also to its new customer who are the small farmers and in the eyes of traditional banks are not credit worthy.

The farmers were asked if there are any disadvantages in receiving the Sudanese Islamic Bank credit facilities. The majority of the farmers (94%) responded negatively. This indicates that the farmers feel the *musharakah* financing to be fair. Through the new system the farmer is sure of equitable sharing of business risk between the Bank and himself. Thus the new system has created a healthy environment for the farmers to work hard and not to sit idle. Idleness is discouraged in Islam. The *Prophet Mohammed* is reported to have said that *Allah* hates persons of sound body and mind who sit idle.

11.10. Comments by Farmers

Finally the farmers were asked to add further comments and facts about any problems are facing. Their comments can be broadly categorised as follows:

- (1) Lack of agricultural inputs;
- (2) *Musharakah* financing has helped the farmer to improve his standard of living;
- (3) Bank's relations with the farmers are satisfactory;
- (4) Problem of farmer unions;
- (5) Need for agricultural tractors;
- (6) Credit is not sufficient.

We will analyse the first three problems, since these dominate the mind of the farmer.

(1) Lack of agricultural inputs

Agricultural production and efficiency largely depend upon the inputs applied and the method adopted. An important factor that has contributed to the increase in agricultural production in the United States and the continent of Europe is

the introduction of synthetic fertilizers. In the LDCs the consumption of fertilizer has increased significantly over the last three decades. Per capita consumption is, however, relatively low compared to the developed countries, thus indicating a potential for increased consumption in the future.

66% of the farmers complained that the Bank did not provide them with sufficient agricultural inputs such as fertilizer. One of the major weaknesses of placing too much emphasis on adoption of improved seed varieties and fertilizers is that timely distribution of those inputs to a large number of farmers requires a well-organized marketing infrastructure, adequate storage and transport facilities. This will put the RDD of the bank under heavy pressure to improve the situation.

Many of the farmers are illiterate and, cannot be expected to follow the constantly changing instructions necessary for effective use of fertilizers and new seed varieties. When price incentives and the requisite literacy are lacking, recurrent expenditures on fertilizer and new seed varieties can easily be viewed by poor farmers as unnecessary. Examples can be drawn from Kenya in the field of fertilizers. One study conducted in Kenya's Central Province revealed that 59% of those interviewed did not use fertilizers at all, mainly because they could not afford to do so. Of those who did use them, 68% applied inadequate or suboptimal amounts at the prevailing prices²⁸.

Therefore the Bank should critically evaluate the role of extension service (conducted by RDD) in the development and supply of improved or appropriate varieties of seeds and the design of recommendations that take into account resource constraints. Many poor farmers living on low potential and very small holdings often fail to get access to input loans, or, when they do, the inputs are invariably misallocated due to misleading advice from the extension network.

²⁸ Ogutu, A. C. A., 'A New Approach to Fertilizer Use and Food Production in Less Developed Countries', in *Agricultural and Economic Instability*, M. Bellamy & B. Greenshields (eds.), International Association of Agricultural Economists 1987, pp.17-20.

(2) *Musharakah* financing has helped the farmer to improve his standard of living

44% of the farmers accepted that *musharakah* financing is beneficial in helping the small farmers who in the recent past had no guarantee to provide to a bank in order to get a credit. No doubt, the new system has opened the door widely for those talented people, who may not necessarily be rich, to present projects that suit their abilities. If such projects are feasible they may be financed in some cases without lien. Their chances in the interest based system will be slim if not non-existent.

In the developing world, profit sharing is particularly important. It makes possible extension of finance to artisans, and handicrafts; supplying them with machines that suit their talents, as well as machines that are adapted to local conditions; level of technology, and using raw material available in those countries²⁹. If such finance is widely extended to those classes this will promote and modernize the handicraft industry; and if labour intensive industries are encouraged and established by those banks, such methods may act as a break to the vicious circle of poverty prevailing in many countries of the developing world. By doing so, these institutions can transform the urban poor into a productive sector of the population. It will be an important achievement and can act as a true vehicle of development.

(3) Bank's relations with the farmers are satisfactory

32% of the farmers indicated that Bank's relation with the farmers are satisfactory. Though the percentage is not high the general impression gathered in the survey is that the farmers feel that they have been treated well by the Bank based on justice and fairness.

The Islamic teaching of brotherhood and equal treatment of all individuals in society and before the Law would not be meaningful unless accompanied by economic justice so that everyone gets his due for his contribution to society or to the social product and that there is no exploitation of one individual by another. The *Prophet*

²⁹ Salama, A. A., 'Islamic Banks Economic Significance and Methods of Control', *Faisal Islamic Bank Sudan Publication*, Khartoum, English Series 3.

aptly warned: "Beware of injustice for injustice will be equivalent to darkness on the Day of Judgement". This warning against injustice and exploitation is designed to protect the rights of all individuals in society and to promote general welfare, the ultimate goal of Islam.

This treatment is expected from an Islamic institution like SIB which sees the small farmers as people who have the talent, with no capital of their own. The financial capital is thus shared between the Bank and the farmer based on profit and loss sharing.

In case of a loss, a borrower, with no capital of his own, not only faces the unbearable liability to return the borrowed capital alongwith interest, but also faces starvation for himself and his family. Compare to this, the Islamic system which guarantees the minimum living needs of human beings (through various institutional arrangements private as well as public) and where the financial capital can only share the profit and losses and cannot earn interest. Firstly, the stake is not as serious as in the interest based system and secondly, whatever the stake, it is shared between the user and the owner of the financial capital. The entire financial loss is to be borne by the owner of the financial capital. In case of loss, there is no liability for the return of capital and there is also no fear of starvation as society guarantees subsistence.

11.11. Conclusions

It may have been observed in Chapter Six that equity financing operations are highly complex and risky by nature. Thus all development banks were, as a rule, required to concentrate primarily on loan financing. In the case of certain institutions, there was a prohibition on equity financing in the initial years. Even at present, the situation has not basically changed.

In sharp contrast to the foregoing situation, *musharakah* financing was made one of the principle functions of the Sudanese Islamic Bank. This was for the reason that *musharakah* financing is deemed to be a highly desirable operation from the *shariah* point of view, insofar as it avoids interest.

The experience of the Sudanese Islamic Bank, with the adoption of *musharakah* as the major financing instrument, represents a positive example which Islamic banks in Sudan and elsewhere should seek to emulate. It corroborates the viability not only of *musharakah* as a financing instrument, but also of financing operations in the productive sectors of the economy. The experience provides an exemplary tool for viable developmental interventions among the poorer sections of the population in underdeveloped countries.

One basic problem underlying the failure of most development interventions - among the poorer sections of the Sudanese people is that developmental projects are conceived and formulated in virtual disregard of the perceptions of the beneficiaries. Such projects often involve high cost complicated equipment which the beneficiaries cannot afford or maintain. In effect, the continuity of the project depends on continued subsidies provided by the implementing agency. As soon as the subsidies cease, the project would collapse. In the conception of its development interventions, however, the SIB seeks to avoid the limitations of such an approach. It seeks to ensure that its interventions would meet three basic requirements: acceptability, continuity and replicability.

Projects have to be familiar to beneficiaries: they should be based on pre-existing techniques and inputs but with a view to developing them further to promote productivity. The continuity of projects requires that the developed techniques and inputs should not be costly, so that when SIB pulls out from involvement in the project, the beneficiaries could on their own take over and continue the project. Replicability means that projects should be sufficiently acceptable and sustainable so that others who are not direct beneficiaries could emulate it.

Musharakah financing attracts active participation of both the Islamic banks and their clients in order to ensure success of their investment operations. On the one hand, Islamic financing institution do not depend for their revenues on fixed interest rates in the manner conventional banks do. They rather generate revenues in the form of a percentage of net profit, and this prompts close scrutiny and assessment of the viability and implementation of their investment transactions. On the other

hand, the clients who become partners contributing capital would be more eager to ensure the success of the transaction to increase the volume of total profits and, by extension, the volume of their share in these profits. The ultimate result is not only a search by the two partners for the success of their joint investment operations, but also a concurrent expansion of the production base of the national economy.

Rural development projects are generally complex, containing several complementary components. For this type of project to be implemented successfully, a high standard of project management is required. Management information systems can make a valuable contribution to efficient implementation of such projects. Evaluation and review of projects can result in experience that will lead to improving the design and execution of follow up projects of a similar nature.

For the success of *musharakah* financing in agriculture, the small farmers, who are the "target group in these new schemes" to be directly affected, should participate to a far greater extent in the planning and implementation process; greater attention should be paid to the attitudes, aspirations, perceptions and priorities of farmers. Traumatic change imposed from above is frequently resented and so is seldom successful in modernizing agriculture. Change must be gradual and within the comprehension and experience of the farmer whom it affects. The study suggests that the introduction of *musharakah* as new mode of financing without fully considering the farmers' attitudes and reservations are, at best, ill-advised, and that a more fruitful approach is to include a high degree of participation by farmers during every stage. To ignore the farmers' attitudes and perceptions is to ignore reality.

The second finding that the study suggests is that local farmers should participate in the operation and management of their scheme. Much criticism was levelled at the management of the local farmer union because of their lack of genuine interest and concern in the *musharakah* financing scheme. There may, therefore, be considerable merit in advocating that an elected group of local farmers, who have a genuine stake in the *musharakah* scheme and who are responsible, reliable and involved in the reality of the situation, should take on the task of local management. The scheme would then become a co-operative in practice and will benefit a large number

of small farmers.

The third finding is that the organization of the rural development department (RDD) is of great importance for the successful implementation of *musharakah* financing in agriculture. Therefore the department which has been given the vital assignment of rural development, should be relatively decentralized and nonauthoritarian if it is to facilitate effective participation of the small farmer in the new scheme. A centralized decision making process appears to inhibit the progress of the department in implementing the scheme efficiently.

The fourth finding is that although the farmers' income has improved relatively after the introduction of *musharakah*, their savings have not. It is the Bank's responsibility through its RDD to change the farmer's attitudes and perception and to make them think about saving for the future through the adoption of voluntary savings schemes³⁰. In other words the extension officer should encourage them to form group savings funds, the proceeds from which are invested by the Bank. In practice the officers are not always successful; sometimes, indeed, they have even been unable to explain to group members what a savings scheme is, and have left them with the idea that it is a form of government tax.

This leads us to stress the importance of rural education, a task for which the RDD should be responsible. Education has always been considered a crucial element in rural development. It provides everyone involved in agriculture, including farmers, extension agents, distributors of agricultural supplies, and policy makers, with both technical knowledge and attitudes toward change and experimentation.

On the whole the experience of the Sudanese Islamic Bank is unique. It has helped the small farmers (who in the recent past were not considered to be creditworthy by traditional development banks like the Agricultural Bank of Sudan) to be in partnership with the Bank. The experience should be encouraged and emulated by other Islamic banks.

³⁰ Mosley, P. and Dahal, R. P., 'Lending to the Poorest: Early Lessons from the Small Farmers' Development Programme, Nepal', *Development Policy Review*, Vol. 3, No. 2, Nov. 1985, p. 203.

CHAPTER TWELVE

CONCLUSIONS AND RECOMMENDATIONS

In the final chapter of this thesis, we intend to summarise the conclusions reached in the previous chapters. The analysis will focus on the main findings of the fieldwork carried out in the schemes managed by the Sudanese Islamic Bank to see how far the experiment of *musharakah* financing has succeeded in helping the small farmers. We point to the advantages of introducing such techniques in agriculture and the difficulties which the Bank encounters in its implementation of the rural development programme. Some practical recommendations are made and further research is suggested*.

12.1. Summary

In Chapter One, a brief survey of all modern theories of interest has been undertaken. It is argued that economists have failed to convincingly justify the payment of interest. No satisfactory interpretation is available to explain the rationale of interest on capital funds. According to many analysts, the recurrence of trade cycles and fluctuations in economic activities can be explained by the presence of interest and the operation of banking in its present form.

The practices of the conventional commercial banking system are in conflict with the principles of Islam which strictly prohibits *riba* (interest or usury). Islam is opposed to exploitation in every form and stands for fair and equitable dealings among all men. On the other hand, Islam does not forbid the profit motive, but restricts it to carefully defined limits. It is not considered wrong for a person to make money, provided he does this honestly and without harming the legitimate rights or interests of others. His economic activity, therefore, apart from earning money for him individually, should be designed to serve the general well-being of the community in helping it to meet its economic needs.

In Chapter Two, the problems of debt financing have been examined in great

* The views expressed in this chapter are entirely mine and do not represent any official views or policies of any organisation.

detail. An assessment has been made of some of the issues raised such as government debt, private sector debt, external debt and debt financing from a firm's point of view. We have also argued how debt financing is unjust and results in maldistribution of income and wealth in society.

Under the conventional economic system the primary mode of finance is debt, and interest is the cornerstone of financial transactions. On the other hand in the proposed Islamic model, capital finance is provided on the basis of a joint venture or a partnership. Chapter Three analyses the framework of *mudarabah*, the profit and loss sharing system of finance. It sets out the economic philosophy of Islam, under which *Allah* is the real owner of all that is in the universe, and man acts only as his vice-regent on earth. Thus man is accountable to *Allah* for all deeds. As a result economic institutions in Islam may not be solely concerned with maximizing profits but have also to think about "doing good to please *Allah*".

The meaning of *mudarabah* and the various forms it takes is also the subject of Chapter Three, which in addition examines the requirements a *mudarabah* has to satisfy to be legitimate. An attempt has been made to examine contemporary Islamic banking and applications of *mudarabah* are discussed. It is argued that effects of a profit and loss sharing system on savings and investments are important and have to be addressed exhaustively by Islamic banks. Finally it is felt that the *mudarabah* form of business organization is beneficial to the society as a whole. The labourers have a greater sense of participation and work harder to increase gross profits which in turn also benefit the financier. It has thus a great potential for growth.

It has to be noted that the concept of an Islamic economic system is not one which has developed smoothly over the centuries. In fact it is only during the past two or three decades that serious studies have been undertaken in this regard after a very long interval of time. Over the years certain steps have been taken in a few countries towards implementing the ideas of an Islamic economy.

An attempt has been made in Chapter Four to identify and define the various

financial instruments available to banks and other institutions under an Islamic economic system. Islam has laid great emphasis on social and economic justice, equity and fair play. These concerns are reflected in the financial instruments devised by Muslims of an earlier era. The first and foremost instrument of finance is *shirkah* or *musharakah*. It is a partnership between two or more persons who combine their capital or labour for their common good. They share the profits and losses equitably and justly. In modern times the partnerships can be institutionalized in banks, limited companies and co-operative societies. Further, these can be regulated. In a *musharakah* the distribution of profits is dictated by the inputs made in capital, management or labour and based on a proportion agreed to in advance. On the other hand losses are to be borne by the partners only on the basis of capital invested. A party which has no capital invested in a project does not have to share in its loss.

It follows that under Islamic principles the banking system has to be essentially equity based. The depositors of the Islamic bank are the shareholders - they cannot be guaranteed a fixed rate of return on their deposits. On the other hand the borrower is a partner of the bank in an enterprise. The bank enters the partnership on the basis of economic viability and profitability of a project and not on the basis of the credit-worthiness of a borrower.

It has also been argued that equity financing will be an aid to mobilization of funds and also lead to stability in the economic system. It is however pointed out that an exhaustive study of stability under an Islamic system needs to be undertaken to draw definite conclusions. The chapter also defines other tools of Islamic financing such as leasing (*ijara*) and cost plus financing (*murabaha*).

The major feature of an Islamic financial system is the absolute prohibition on all forms of interest. This requirement implies fundamental changes in the tools and operations of financial institutions.

Chapter Five focusses on the shape that fiscal and monetary policies are expected to take in an Islamic system. To start with a number of complex issues

are raised by the requirements of an equity-based financial system without an assured rate of return. In this chapter we examine the operation of Islamic banks and the practices and instruments developed and used at present. Also the role of the stock market in an Islamic economic system is emphasised before an analysis of the objectives of fiscal policy.

Zakat, which is an important part of Islam, is defined and its aims and conditions on its use are explained. From the discussion it is clear that *zakat* works in an Islamic state as a social security and as a method of redistribution of wealth. The absence of interest has led some Muslim economists to believe that monetary policy in an Islamic economy will have a very limited role. However it is argued that monetary policy does have an important role.

In view of the recent trend to establish financial institutions working within the confines of the *shariah*, it is important to identify the obstacles to their successful operation. This has to be the first step in looking for possible remedies to the problems encountered by Islamic banks.

Chapter Six attempts to undertake a study on the lines mentioned above. It is recognized that management and not capital is the critical factor in the success or failure of projects. As such it is suggested that in addition to the managerial capabilities of a high standard, the management of an Islamic bank should have a comprehensive entrepreneurial quality. Certain malpractices prevalent in present day banking are identified and the need to harmonise the accounting policies by Islamic banks is underlined.

As often stated in this thesis, the financing of long term projects by Islamic banks has certain pre-requisites not encountered by commercial banks. Because financing by an Islamic bank is synonymous with entering a partnership it has to undertake a follow up of its projects in addition to initially undertaking feasibility studies and estimating the expected profits. Also it has emerged that Islamic banks find it difficult to identify sound financing opportunities.

Another problem identified is the risk of fraud which is more likely to affect

Islamic banks. To minimize the risk the Islamic banks can collect and use statistical data more effectively. The implementation of the Islamic law of contract may help, as may third party insurance and maintaining loss-compensating reserves.

Quite often central bank regulation, particularly those regarding monetary reserves and liquidity, impede a smooth functioning of Islamic banks. Taxation poses another problem as the bank's share of profit from a project is treated as taxable. Both these issues need a persuasive dialogue with the authorities concerned.

Long term planning, in case of an Islamic bank, faces significant uncertainty as a result of frequently changing government policies. Coupled to all the difficulties identified above is the highly complex nature of equity financing. All of these require a much greater involvement of Islamic banks in research and training.

As this study focusses on one Muslim country, namely Sudan, it is of relevance to point out characteristics of Sudanese economy. Though the average population density is around 8 per square kilometer in Sudan, nearly half of the country's population is concentrated on 15% of the land. Agriculture is the most important sector of the economy and its contribution is the subject of Chapter Seven. It also surveys the various crops grown and their yields over the last few years.

Agriculture employs almost 80% of the Sudanese population. It makes also the largest contribution to export earnings, besides providing food for the people of Sudan. Yet it is disturbing to find that its share in the GDP shows a declining trend. It is felt that a positive improvement can only come about as a result of a complete restructuring of the economy.

It was also found that agricultural and development policies in Sudan have been unbalanced. Agricultural development has depended on foreign capital and has contributed to the balance of payments deficits. Further it seems that investment has focussed on large scale and expensive projects with the transport and construction sector receiving more than their due share, at the expense of the productive sectors of agriculture and industry.

Chapter Eight focusses on the financial institutions in Sudan. It has been

pointed out that primarily the banking system has developed after Sudan gained independence in 1956. The central bank called the Bank of Sudan was established in 1959. A major step was the nationalisation of the banking industry in 1970, with the multiple aim of improving banking facilities, gaining effective control over monetary policy and the control of capital investment.

The prime objective of the governments' monetary and credit policies remains to contain inflation by restricting credit. At the same time it has to ensure adequate finance for productive economic activities. Consequently strict limits are prescribed on a commercial bank's lending to its customers. It is to be noted that 80% of total bank credit was utilised by the government for purposes of financing exports, agriculture and handicrafts etc.

There are special purpose banks in Sudan: The Sudanese Real Estate Bank finances house building by individuals. The Industrial Bank of Sudan is charged with developing the private industrial sector. For the agricultural sector the Agricultural Bank of Sudan was the major credit source prior to the introduction of Islamic banks. It was also pointed out that in the rural areas of Sudan, informal credit in the form of the "*shail*" system still plays an important role.

The Agricultural Bank of Sudan (ABS) is the subject of Chapter Nine. It was established by the government to support agriculture and related activities. The ABS has till now limited its activities to short-term lending. For this purpose the Bank accepts as collateral land, buildings, crops to be harvested or in store and guarantees by the government, public institutions, autonomous agencies or co-operatives.

The main sources of funds for the ABS are low interest (6.5%) loans from the Bank of Sudan and the profits accumulated in the course of its trading activities, rent from crops stored and the interest (12%) on agricultural loans and commercial commissions. It also accepts deposits from the public.

The Chapter also includes the results of a survey carried out in two areas which are financed by the ABS. It was noticed that most of the farmers did not till their

land themselves, and almost all hired outside labour. The use of family labour is minimal. Among the produce, vegetable was dominant, while fruit and fodder also enjoy some importance. The data also indicates that a majority of farmers (78%) can be classified as well-off in the Sudanese context.

The small farmer's experience with the ABS points to the several short-comings, not the least of which are the conditions attached to credit. Often, due to the strict procedures, the small farmers prefer to deal with the *shail* system. The farmers also complain of the Bank's neglect of the marketing and storage questions. A large number also point to the need of more credit facilities, and a majority did not recognize any advantage in receiving credit from the ABS.

A major impediment in achieving rural development by institutions such as the ABS has been identified as the excessive centralization of all major decision making. The Bank has to pay more attention to conditions on the ground and modify its credit policy.

Chapter Ten, deals with the Sudanese Islamic Bank. This was established in 1982, and is engaged in providing banking services in accordance with Islamic *shariah* laws. Its role in rural development cannot be judged merely by the growth in per capita income, but is also dictated by the question of moral values in banking transactions. One distinctive feature is the belief that economic and social development cannot be isolated from spiritual and moral development.

As the Bank has realized that the small farmer is the backbone of the country's agriculture, it has consequently targeted this long neglected section of society in its credit and *musharakah* operations in the rural sector. Judging from the records of the Bank, as discussed in Chapter Ten, there has been an improvement in the conditions of the rural poor, yet there remains a lot to be accomplished.

Since its inception the Bank has seen a steady increase in its fixed assets (24.1% in the year 1408H). Also there has been a growth in deposits though the Bank is hampered by a narrow lending ceiling, imposed by the Bank of Sudan, in utilising the deposits for investment. All in all, the Bank's performance is satisfactory.

The Bank's operations cover *musharakah* in trade and industry apart from agriculture, and in spite of the stringent controls on credits imposed by the central bank, the SIB was able to offer a dividend to its shareholders. It was felt that there needs to be further improvement in its agricultural operations, especially for an autonomous and efficient rural development department.

Chapter Eleven is based on a questionnaire distributed among small farmers involved in two agricultural schemes of the Sudanese Islamic Bank. It was found that the major produce are vegetables and that there is a need for the farmer to diversify his crop. Vegetable production is a traditional activity though prior to the introduction of *musharakah* financing it was not practiced on a commercial footing. Consequently most of the farmers are new to producing for the market. They have realized the potential of growth in the agricultural sector, and now an overwhelming 90% cultivate their own farms. The figures suggest that *musharakah* financing has been successful in stemming the rural to urban migration.

The survey also indicated a rise in annual incomes of the farmers as compared to incomes before the *musharakah* partnership. However most of the farmers claim that the income from agriculture alone is not sufficient and consequently they are involved in some off-farm work. The Bank has thus also introduced a family poultry scheme which would bring in useful extra income. As for now, most of the farmers bridge the financial gap by private borrowing from friends or relatives. The Bank has not made sufficient inroads in this area and only 2% the farmers surveyed had borrowed from it. It was also found that most of the farmers had not opened a deposit account with the Bank. This fact points to the need for information and encouragement so that farmers enjoy the benefits of savings.

It was also felt that the Bank's credit policy is concentrated on financing projects of a rather short-term nature. It needs to be emphasised that medium or long-term financing should not be neglected.

Even though the banking system is a relatively new development in the Sudan, the SIB has succeeded in penetrating the rural areas, through its *musharakah*

financing projects. In order to build upon its successes the rural development department (RDD) of the Bank has a crucial task. The need for decentralization and devolution is strongly felt. The projects have to be conceived and implemented in partnership with the beneficiaries. Needless to say centralization has more often than not resulted in inefficiency and failure.

12.2. A Comparison of Fieldwork Surveys

Agriculture being the dominant sector in Sudan and the mainstay of the rural economy, the growth of this sector will be pivotal for rural development. Whether one takes the point of view of production or of equity and social welfare, to by-pass the rural population in the crusade against poverty, hunger, malnutrition, disease and ignorance will be committing not only economic but also social and political suicide. It is in the rural areas that the challenge of national development lies, and although a few successes have been recorded in specific local problem areas the overall war against poverty is still to be won.

In Chapter Nine and Eleven we reported the results of a survey carried out regarding the roles of a conventional bank (ABS) and an Islamic institution (SIB) respectively in rural development. Here, it is our purpose to submit the results to a comparison.

In the areas of Kamelen and Jaili, which are served by the ABS, vegetables accounted for 70% of farm output and fruits made up 22%. On the other hand, in the Shehenab and Islang-Island projects managed by the SIB, fruit production was just 2% of the farm produce, whereas vegetables dominate with 94%. Significantly, in both areas, 40% of the farmers had embarked on agriculture after 1975. This may be explained by the concerted efforts of the Sudanese government, and the involvement of international financial institutions such as the World Bank.

A significant difference in the two regions is noticed in the average size of the family. Among farmers dealing with the ABS, 44% had families of more than 10 persons. The same figure for farmers dealing with the SIB is 22%. Average families of 6-10 persons form 40% of the total in the ABS schemes and 52% in schemes run

by SIB. Of significance in this connection is the farm size and the outside labour employed.

It is to be noted that whereas in Shehenab and Islang-Island schemes farmers employing more than 10 persons as outside labour formed 6% of the total, the corresponding figure for Kamelan and Jaili schemes is 32%. This can perhaps be related to the fact that almost 18% of farms in the latter schemes are large (more than 51 feddans) as compared to 4% in areas with the SIB. In fact the average farm size (11-25 feddans) under the ABS scheme accounted for 30% whereas the corresponding figure for the SIB project is 20% of the total number of farms. The data indicates that the SIB has, in implementing its scheme, targeted small and poor farmers. Farmers holding 0-10 feddans formed 70% of the total in SIB project area whereas in the schemes financed by the ABS 28% of the farmers held less than 10 feddans of land. Another important difference is observed in the number of farmers working on their own land and those who hire outside labour. Under the scheme run by the ABS, work on 56% of the farms was carried out by the farmers. The relevant number for the SIB schemes is 90%. It does seem that a farmer under *musharakah* financing is more involved in his farming in relation to his conventional colleague.

A similar conclusion can be drawn from figures on the income of the farmers. In spite of smaller farms under *musharakah* financing 86% of the farmers had an annual income of more than £S 3000. On the other hand 78% of the farmers had a similar annual income in the area where the ABS operates. The benefits of *musharakah* financing are also evident in the diminishing role of the *shail* system in SIB project area where only 18% of farmers used it for their credit requirements. In the ABS schemes as much as 50% borrowed from *shail* merchants. However borrowing from a bank is still limited. In Shehenab and Islang-Island only 2% of the farmers had borrowed from the SIB. The corresponding figure is 8% for the project run by the ABS.

Another difference in the operation of the conventional and Islamic banks is apparent on an examination of the figures relating to financing of agricultural inputs.

Under SIB, 20% of the farmers had 100% of their seed inputs financed through a *musharakah* compared to 4% who financed all of their seed input through a loan from the ABS.

Both the ABS and the SIB fare equally well in providing irrigation facilities. It may be mentioned here that the SIB has recently initiated a mobile workshop project to enable efficient maintenance and functioning of the irrigation system. However in the important area of marketing services 46% of SIB's partners feel satisfied with the help provided by the bank compared to 36% of ABS's clients. Another critical factor for perishables like vegetables and fruits is of appropriate storage facilities. While 50% of farmers dealing with SIB were satisfied with the storage facilities, only 22% were among the clients of ABS.

The perceptions of farmers regarding the two banks (ABS and SIB) are vastly different. 62% of farmers surveyed in the area where the ABS is active do not see any advantage in receiving credit facilities. Significantly 82% of those surveyed in the SIB schemes thought otherwise.

The figures collected in the two surveys and compared above do appear to support the argument that the Islamic mode of financing is more effective in promoting rural development. *Musharakah* in agriculture has been quite successful in attracting the small farmers in the two schemes of Shehenab and Islang-Island and the experiment needs to be emulated.

12.3. The Current Economic Situation

It is only fair that before we attempt to put forward some recommendations for consideration by the Sudanese Islamic Bank, we highlight the general economic situation in Sudan. The reason for this is that the performance of any financial institution, regardless of its objectives, is highly affected by the economic and financial climate prevailing in the country.

Sudan is currently experiencing the sharpest economic deterioration since the early 1970's as a result of the cumulative impact of a number of internal and external factors. The civil war in the south which costs millions of dollars a day and is holding

up several development projects, the influx of refugees from Ethiopia and Uganda, the impact of drought affecting as many as 11 million people, and a growing debt burden which is siphoning scarce resources, have made the prospect for recovery exceedingly dim.

Economic difficulties, such as those facing Sudan are indeed complex and defy any of the simplistic solutions like exchange rate adjustment and liberalisation of price policy. The latest structural adjustment policy is a prescription for disaster since it is based on highly optimistic projections of foreign aid, international commodity prices and improving weather conditions. Indeed, the prospects for primary products and simple manufactured exports, aid and borrowing in the 1980's are worse than the conditions experienced in the 1970s'.

One of the major mistakes made by the government was that, despite the obvious declining potential of the economy, the structural adjustment policies focused largely on generating sufficient foreign exchange earnings from expanded agricultural production whose prospects are uncertain. Furthermore, the successful implementation of the adjustment programmes depended largely upon the capacity of the government to attract external assistance. This was a serious error for two reasons.

Every single element of the economic crisis in the country is not caused by foreign exchange shortage. Instead, external shocks, under-utilisation of existing institutions, infrastructure, human resources, financial and managerial indiscipline, are at the core of the economic predicament.

The heavy reliance on external capital to rectify the current crisis was very unrealistic. More so because no concerted effort was made to determine the main causes. The issue of sovereignty versus control should have been taken into consideration since there are no "free meals" in the present international political and economic environment. While Sudan's adjustment programme was hampered by too much external intervention, the projected foreign aid and credit did not materialise as donor agencies demanded major policy changes which the government was reluc-

tant to implement. Whatever the weight of external causes in the current crisis, domestic restructuring is essential and must be based on a realistic identification and better utilisation of local resources and capabilities. For the immediate future, the first priority can no longer be expansion, but rather consolidation of whatever has been achieved during the last two decades.

Ultimately the answer to the economic problems can only be found within their borders, not outside. It is unreasonable to expect that outsiders will be willing to sacrifice their privileged position in the world system so that the Sudanese can live better. Thus the basic structural factors that need to be adjusted with long-term policies in the country are those of production, consumption, technology, distribution and ownership. It is quite possible for the country to develop by relying mainly on its national resources, and there is no real alternative to this.

12.4. The Challenge Facing the Banks in the Sudan

It is against this background that the Islamic banks in Sudan should play a major development role through their heavy involvement in partnership financing, *musharakah*. Islamic banks have a moral obligation (which makes their role unique and superior than traditional banks) to fulfill in order to alleviate some of the problems that face the country. This requires more hard work, dedication and commitment to the cause. By investing more in *musharakah* financing (which is more oriented towards development) than *murabaha* and *mudarabah* (which are commercially oriented) they can meet their moral obligations. Islam seeks the development of the human being rather than a quick profit accrued by some of the Islamic banks which has benefitted the few at the expense of the masses. Without doubt, the Islamic banks have passed the stage of infancy during the last two decades and if they want to survive they have to support the masses in order to achieve justice and fairness.

The rural development programme initiated by the Sudanese Islamic Bank answers some of the questions raised and criticism made in the recent past by different circles. Such criticism cannot however be borne by the Islamic banks alone. A tra-

ditional institution like the Agricultural Bank of Sudan also bears responsibility. It is felt that its role (as the formal agricultural finance institution in the country) in the rural area is insignificant. The insistence of the ABS on collateral requirement from the farmers has not helped the cause of rural development. One way to achieve this is to generate surpluses by reducing the cost of lending with a fixed revenue, or by increasing the revenue with a fixed cost or to reduce the cost and increase the revenue if both can be manipulated. To achieve that the collateral requirements are an easy way to reduce lending costs by exempting the small borrowers who cost more to serve per unit of money lent. Although the collateral is often ineffective in preventing default, yet the ABS strongly insists on this requirement. Many ABS customers explained some of the following adverse effects of such requirements based on their experience. The requirement of collateral excludes many small borrowers from institutional credit, restricts the area cultivated and concentrates credit in the hands of a few. It also increases the cost of borrowing which is more pronounced for the small borrower since the large borrower is able to spread the transaction cost of providing collateral over a large number of borrowed units. Furthermore, it also appears that a strong collateral requirement does little to assure repayment. Often when the loan procedure is completed the need for the loan is gone or the small farmer has received financing from informal sources. The bank loan is then diverted by the borrower to other non-farm uses. Under such conditions no increase in farm productivity or farm income results from the use of institutional credit.

As so much emphasis is placed on collateral requirements the promotional activities of the bank are neglected. Little effort, if any, is directed to collecting information about creditworthiness of the borrowers, his actual needs and credit use. Furthermore, it was observed that the collateral proved to be insufficient to guarantee loan repayment. Clients know that a legal action takes years. Even when the court makes a resolution to sell the collateral the client can find one way or another to pay, for example by instalments.

It is obvious from this study that the financial role of ABS is limited in the rural areas. The government's intention in setting up the Bank was to provide capital

at concessionary interest rates. It had also fixed the borrowers' interest rates at below the equilibrium levels, and then directed the Bank to increase the volume of institutional credit going to agriculture in order to fight the *shail* merchant. The survey shows that the services of the ABS to agriculture are deteriorating and that the number of the rural poor served is decreasing. The findings of this research also show that the role of commercial banks in the Sudan is insignificant due to the fact that these institutions do not provide loans for agricultural production and are reluctant and inefficient in mobilizing rural savings. Informal moneylenders were found to be dominant and flourishing in the rural areas although they charge a much higher interest as compared to formal institutions.

The Sudanese Islamic Bank (SIB), in spite of being a young institution, has taken the initiative in "*musharakah*" financing and paved the way for other Islamic banks in the Sudan and elsewhere. It has demonstrated that *musharakah* financing is workable and profitable. The banks' experience has broken the inertia of bankers who thought that *musharakah* financing is a risky venture and should be avoided by concentrating on short and medium-term investment (through *murabaha* and *mudarabah*) rather than a long-term investment through *musharakah*. Needless to say that the continued success of *musharakah* financing will depend on the quality of management.

However, rural development cannot be conceived in terms of isolated activities. It is a much more complicated process which requires a more comprehensive and integrated approach by the Sudanese Islamic Bank. This broader vision of rural development is not limited to economic development in the narrow sense, but embraces the promotion of social development as well. This objective by itself requires close cooperation between the Sudanese Islamic Bank and the Agricultural Bank of Sudan in different fields, mainly financing, training and agriculture extension. The ABS has made successful attempts in the recent past to train its own staff locally and abroad in order to enhance efficiency of its own cadre and has also built good relationship with other institutions. A newly established institution like the SIB should benefit from the ABS in order to enrich its experiences in the area of rural

development.

If steps are taken to make rural life more attractive, migration to urban areas can be checked. This would also attract the skilled personnel required in agriculture services for promoting agricultural development, opening up feeder roads, provision of schools, hospitals, piped water and other services. The country's present system of education is regarded by the author as an escape route from the countryside. The primary school education is used mainly as a foundation for further education and has little value to offer to a child returning to an agricultural environment after a few years. Children who proceed to secondary school are often reluctant to work in the countryside. It is felt that a fundamental reform of the education system is needed.

However, it may be emphasised that we have only looked at one facet of the problem. Sudan faces problems of enormous complexity and gravity and it would be unwise to suggest that certain measures in the economic sphere would lead to utopia.

12.5. Planning Problems

It was pointed out earlier that a major problem of the agricultural sector in Sudan in general and the two institutions under examinations (the Agricultural Bank of Sudan and the Sudanese Islamic Bank) in particular, is in the planning of a project. The factors behind this are both complex and numerous.

An efficient extension service could have gone some way towards alleviating the problems of the inexperienced credit officer who lacks intensive training and is not prepared either culturally or socially to be able to advise the farmers on various crops. Unfortunately, during the work reported here no such extension service was available. Although meetings with groups of farmers were held, the officer concerned often found that it was only through personal contacts that any success was achieved. Farmers were keen on the idea of an extension service; indeed, at one particular farmer's meeting it was felt most strongly that closer supervision and more relevant agricultural advice were two highly important factors in furthering

rural development.

The management of SIB is eager to establish the profitable nature of *musharakah* financing for all the partners involved. Nevertheless it should also bear full responsibility in monitoring and follow up the projects. Also it has to be realised that in keeping with the cooperative nature of the financed projects a greater local participation is crucial for increasing the confidence of the farmer in the viability of the *musharakah*. It was felt during the course of our study that some of the people involved in the cooperative projects of the SIB take only a limited interest in the *musharakah*. Unfortunately those people are among the most influential in the rural communities. The situation can be likened to the past when the *nazir* of the area discouraged any form of change or progress because of the fear that it would undermine tribal authority and loosen social ties.

It is evident that the planners' aim for the (*musharakah*) financing scheme of the SIB under examination (Islang-Island) have not been realized. Farmers have responded in unexpected ways. A principle explanation is that socio-personal factors were not fully taken into consideration in the planning framework. The result has been the emergence of a land-use pattern which conflicts markedly with the proposed system. Two main conclusions or recommendations relating to the planning process may be drawn from the fieldwork on Islang-Island project financed by SIB.

First, it is suggested that some of the farmers who are to be directly affected by *musharakah* financing projects should participate to a far greater extent in the planning process; greater attention should be paid to their attitudes, aspirations, perceptions and priorities. Imposed changes from above are frequently resented and so are seldom successful in implementing *musharakah* financing based theoretically on justice and fair play. It is hoped that the present study has emphasized that introduction of the new *musharakah* financing techniques in agriculture, without fully considering the farmers' attitude is, at best ill-advised, and that a more fruitful approach is to ensure a higher degree of participation by all parties involved during the planning stages.

Second, it is suggested that the management of the two institutions (ABS and SIB) should call for regular meetings or arrange seminars of a practical nature with and for the farmers to discuss various problems faced by farmers and to suggest some solutions. There may, therefore, be considerable merit in advocating that an honest elected group of local farmers, who have a genuine stake in the project, and who are responsible, reliable and involved in the reality of the situation, should take on the task of management.

Countless development projects have been introduced throughout Africa. A good many have been marked by limited success. We have to stress that any proposal for social or economic reorganization of village life must take into account the views of the farmers to be affected. Planning decisions imposed from above, paying only limited attention to the farmer's problems, are highly questionable.

Considering the fact that success of the Sudanese Islamic Bank depends greatly on the direction, guidance and support it receives from other Islamic banks, it is very important to strengthen and vitalise the contacts with them. The task assigned to the Bank is formidable and extensive and other Islamic banks should assist this young institution in its unique work.

The task of decision making has to be shared as widely as possible instead of remaining concentrated at any one point. It is necessary to establish a system whereby decisions of different types and varying degrees of importance are made at various levels¹. It is clearly not conducive for efficiency to concentrate decision making at one point in the organisation while other functionaries merely provide inputs or act in an advisory capacity. If the task of decision making is distributed, it will not only lead to elimination of delays but would result in a marked improvement in quality of the decisions themselves. In order to have an effective system of decision making, clear cut functions with adequate authority need to be specified and it should be ensured that those given the authority have the capacity to carry them out properly. A particular job which could be carried out at a lower level

¹ Meenai, S. A., *The Islamic Development Bank: A Case Study of Islamic Co-operation*, Kegan Paul International, 1989, pp. 179-189.

should not be undertaken at higher levels in the Bank. For this reason, the bank must step up its efforts to prepare instructions, rules, regulations and guidelines so as to serve as a framework for decision making at various levels.

The importance of training in any organisation is self-evident. It is particularly important for an institution like the SIB which is in the process of establishing itself and which has several special features.

12.6. Recommendations Concerning the Sudanese Islamic Bank

(A) Utilisation of University Graduates

According to very recent (1989) estimates there are 36,000 university graduates in Sudan who are unemployed. The government has allotted to each of these unemployed youth a small piece of land for cultivation. These graduates, however need the necessary agricultural inputs. The Bank should utilise this unique opportunity to benefit not only the educated youth, but also to gain benefit from them in return. The unemployed graduates can be provided jobs under a *musharakah* as well as becoming worthy partners in rural development. Coordination with the ABS and other government departments may be helpful in implementing this idea.

(B) An annual seminar focussing on practical issues facing the small farmer in *musharakah* financing is deemed necessary. This will help the SIB to learn from its own mistakes and provide a useful feedback on its policies. Other Islamic banks, who in the last two decades have concentrated their investments on short-term *mudarabah* and *murabaha* financing and avoided the long-term *musharakah* will also benefit a lot from such an activity. These seminars will definitely enrich and widen the scope of Islamic banking.

Other Islamic banks, commercial and development bankers and university academics interested in Islamic financing should be invited to participate and contribute to these seminars. Ideally the seminars may be organised by the Rural Development Department of the Sudanese Islamic Bank and can be supplemented with field visits.

The seminars may result in a position paper which elaborates on the concepts of *musharakah* as a new mode of finance in agriculture, its objectives and applicability in view of the real situation obtaining in a particular rural area. Finally the paper should be followed by an operational plan including guidelines and time schedules.

(C) Administrative Responsibility

Meaningful work in agriculture requires dedication, commitment and ability of a competent director to take the right decision at the right time. For the success of *musharakah* as new mode of financing, it is felt necessary that the SIB should delegate complete responsibility to the director of the Rural Development Department (RDD) thus enabling him to concentrate on project monitoring and follow up.

For successful administration of a project it is important that the director of the RDD should have the ability and competence to contact other institutions outside the project. Such contacts among the professionals, administrators and the research staff are essential for the success of a *musharakah* financing project.

(D) Training

The Bank should have a clear policy regarding the training of its staff. Since the institution is new it should benefit from the experience of other organisations involved. This would call for a great deal of collaboration and co-operation in this field with the Islamic Development Bank, through participating in their workshops and seminars.

Field work training is vital for the staff of the Bank. Only then will the problems faced by the small farmers be identified. The success of any project depends not only on good management but also a good response from the farmer. It is important to choose farmers willing to participate in the workshop and assist the Bank in various ways and means to train its workers.

In practicing agriculture inevitably means field work, it is thus necessary that RDD should have a unit in the rural areas where the administrative problems can be resolved on the spot. One has to bear in mind that the communication problem

is one of the main impediments to rural development in Sudan. On the other hand the establishment of such units in the field will undoubtedly lift the morale and give more incentives to the farmer in his hard work.

The training should emphasise the very important aspect of bridging the gap of communication between the farmer and the Bank. It was noted during the course of the fieldwork reported here that the farmers talk very openly and honestly about their problems once they are approached in the right way. The poor farmers have been neglected by the authorities in the past and need to be assured of the sincerity and good purpose of the SIB in its *musharakah* financing operations.

(E) Promote saving among rural farmers

Promotion of rural savings benefits both the rural people and the banks. The availability of saving opportunities discourages unproductive household consumption by the poor while savings increase their capital and resource base and consequently their bargaining power. For the financial institution, savings increase the funds available for lending. This translates in reduced dependence for funds on central banks or foreign agencies, and consequently less intervention by politicians and other vested interests. Savings pave the way for increased local participation in financing bodies, which makes them more responsible both to borrowers and depositors. Through savings, banks can reach a much greater number of rural people than through loans and thus become aware of their needs, preferences, and cash flows.

(F) Extension and Education

Extension work is vital for the success of a *musharakah* project. Unlike formal school education, it endeavours to formulate a specific programme for each need served. It is felt that the success of an extension programme depends crucially on local participation. This is all the more so as the programme has to evolve with changing circumstances and emerging priorities. The best and most trusted process for planning extension programmes is to involve professionals and local leaders to jointly identify problems, set forth realistic objectives and suggest means

for achieving these objectives².

Extension programmes should not rely on local leaders for planning purposes alone. The Bank should involve them also in the execution of its programmes. In order to supplement and complement the efforts of local extension workers, it may identify some innovative leaders, train them and involve them as volunteer "teachers" in their communities. This would reduce the time factor in the diffusion and adoption of recommended farm practices. Human development requires patience and thus takes time, more time than is generally allocated to technical projects with roughly similar goals for physical achievements. The extra time required is needed to organize the farmers into participative groups, as well as to allow for the learning process to take place by the extension worker and other staff of the rural development department.

(G) Data Bank

A thorough understanding of the economic, political and social context in which a project is to be implemented is vital. The basic information relating to social and anthropological factors in most rural areas does not exist in a recorded form. As a consequence a lot of time is taken up in compilation of the relevant data. Possibly the banks and financial institutions involved in the rural areas can pool the data collected by each into a common data bank for their common good. This can eliminate unnecessary duplication and thus save time.

12.7. Advantages of Musharakah Financing

With the advent of *musharakah* financing in agriculture things have definitely changed. Improvements are evident in the areas under two SIB schemes which were surveyed. Whereas earlier many landowners used hired labour for farming, now they are more active themselves. The farmers now cultivate their land twice a year and have realized the potential for their economic and financial well being.

² Douglass, M. A., 'Agricultural Extension: Principles and Constraints', *Agriculture & Development in Western Asia*, Joint Publication of the United Nations Economic and Social Commission for Western Asia and The Food and Agriculture Organization of the United Nations, December 1986, No. 9. p. 35.

Before the entry of the SIB, most of the land was unutilized and farming was only a marginal activity aimed at subsistence. With *musharakah* financing this marginal activity has become the major occupation of the farmers. Consequently the average annual income of the farmer has grown.

A major success of *musharakah* financing appears to be in tackling the rural to urban migration. A significant number of young people are now involved in agriculture, where the potential for growth is significant. *Musharakah*, thus has the potential for addressing successfully some of the important issues in rural development.

Another significant achievement of this new mode of financing is the diminishing role of the exploitative *shail* system. The cooperative role of the bank-farmer partnership is in line with Islamic concepts and needs to be emulated by other institutions.

The storage and marketing facilities provided by the Bank under *musharakah* financing have led to considerable benefits to the farmer. With the consequent profits earned by the farmer, he has often financed his own seed inputs. In contrast the farmer was almost always reliant on the *shail* merchant for his inputs and had to pledge his future crop for the credit.

12.8. The Bank's Problems

A wide range of problems are encountered in the Sudanese rural sector. These vary from limited available resources to rural poverty, high unemployment and poorly developed economic activities.

The Bank is facing many difficulties as a new institution involved in *musharakah* financing. The Bank wishes to promote rural development, a task which cannot be left alone to a young institution like the SIB. At the same time it has to maintain its financial position. Banks usually prefer short-term, instead of long-term, advances in the agricultural sector, particularly to small farmers. The reasons suggested are the high administrative costs associated with a large number of small scale credits. The banks find it expensive to employ specialist credit officers and meet

the high running expenses of its agricultural projects. In this respect there is some justification for financial assistance from the government³.

There are, however, a number of potential weaknesses relating to the necessary institutional framework. A number of these were noted in the discussion. The greatest danger with a programme of this nature is over-extension of what are inherently limited resources in the attempt to overcome as many problems as possible. This is particularly evident with regard to financial resources and skilled manpower. Problems relating to the shortage of skilled manpower are accentuated by the need to spread rural development services to other branches in order to meet the requirement of the programme.

A further potential problem with the programme is of communications between relevant organisations. The requirements of the programme are such that close contact between the head office and branches is essential. However, there was no evidence to suggest that liaison between all interested parties was good.

We conclude that *musharakah* financing through farmer participation is beneficial in development projects and should be encouraged by other Islamic banks.

12.9. Further Research

There are many issues (not covered by this study) which need further research. The Islamic banks, in recent years, have seen a larger inflows of deposits. They are now well established and confidence in them has grown. One could study the various ways in which the SIB can help other Islamic banks who wish to invest in *musharakah* projects run by themselves. It would also be pertinent to enquire about the incentives which the SIB can offer to other institutions who wish to invest in projects of the SIB run on the *musharakah* mode of financing.

We have also not considered the instruments for disinvestment whose need will arise when an outside investor wants to sell his shares. Further study would be needed in regard to the role of a stock market in an Islamic economic system, and

³ Markings, S. M., *Agricultural Problems of Developing Countries in Africa*, Oxford University Press, Nairobi, 1978, p. 84.

also in determining the value of shares when inflation is taken into account. In short much more research has to be undertaken before an economic model can be developed in complete harmony with the principles of Islam.

Appendix (I)

**A QUESTIONNAIRE SUBMITTED TO FARMERS
OF AGRICULTURAL BANK OF SUDAN
AND SUDANESE ISLAMIC BANK**

(A) General Information

1. Type of activity:

2. Date of starting farming activity:

[a] 1950s

[b] 1960s

[c] 1970s

[d] 1975 onwards

3. What is the size of your family ?

[a] up to 5 persons

[b] 5 - 10

[c] more than 10

4. Do you employ any laborer from outside other than your family ?

[a] yes

[b] no

5. If yes, how many do you employ from outside ?

[a] up to 5

[b] 6 - 10

[c] more than 10

[d] others (please specify)

6. What is the size of your farm ?

[a] up to 5 feddans

[b] 5 - 10

[c] 11 - 25

[d] 26 - 50

[e] more than 51 feddans

[e] others (please specify)

7. Do you alone cultivate your farm ?

[a] yes

[b] no

8. How many times do you cultivate your land each year ?

[a] once

[b] twice

[c] more than twice (please specify)

9. What kind of food crops do you grow ?

[a] dura (sorghum)

[b] dukhun

[c] groundnuts

[d] sugar

[e] wheat

[f] others (please specify)

10. What types of crops do you consume from outside your farm ?

- [a] sugar
- [b] wheat
- [c] vegetables
- [d] others (please specify)

11 . What is the relative importance of the following crops?

	Very important	Important	Less important	Not Important
Dura				
Dukhun				
Groundnuts				
Sesame				
Sugar				
Others (specify)				

12. Which of the following cash crops do you cultivate ?

- [a] cotton
- [b] sugar
- [c] groundnuts
- [d] others(please specify)

13. What is the range of your annual income ?

- [a] £S 1000 or less
- [b] £S 1000 - 2000
- [c] £S 2000 - 3000
- [d] more than £S 3000

14. Is your annual income from Agricultural sufficient enough to support your family ?

[a] yes

[b] no

15. If no, how do you bridge the gap.

[a] by borrowing from relatives

[b] from private sources outside the family.

[c] from the banking sector

[d] others (please specify)

16. What are the main sources of your income ?

[a] Agricultural

[b] other means (please specify)

17. How do you finance your seed inputs ?

Source of finance	Percentage			
	25%	50%	75%	100%
Yourself				
From a bank loan				
Other means (specify)				

18. Do you have a deposit account with a bank ?

[a] yes

[b] no

19.) If yes, why did you open the account ?

- [a] my savings are safer in a bank.
- [b] I get a return on my savings.
- [c] The bank would only offer me a loan if I opened an account.
- [d] other (please specify)

(B) CREDIT INFORMATION

20. Have you ever dealt with banks before ?

- [a] yes
- [b] no

21. When did you start to deal with banks ?

- [a] 1950s
- [b] 1960
- [c] 1970-1974
- [d] 1975 onwards

22.) Have you approached more than one bank for credit ?

- [a] yes
- [b] no

23.) If yes, which of the following you have dealt with :

- [a] Agricultural bank
- [b] Government credit agency
- [c] Islamic bank
- [d] others (please specify)

24. Does the bank help you in storing and marketing your crops ?

[a] yes

[b] no

25. What of the following problems do you face ?

[a] Irrigation.

[b] marketing problems

[c] storing problems

[d] others (please specify)

26. What kind of incentives does the bank provide for you ?

[a] Purchases of Agricultural inputs (such as seeds,fertilizer)

[b] Marketing your crops

[c] storing your crops

[d] others (please specify)

27. What is the credit terms extended by the bank ?

[a] under six months

[b] six months - one year

[c] over one year

28. Do you require more credit facilities ?

[a] yes

[b] no

29. If yes, why do you want more credit.

- [a] to introduce new crops
- [b] to undertake farm improvements (e.g new irrigation work)
- [c] for family reasons
- [d] to pay off previous debt
- [e] other (please specify)

30. Do you think the existing marketing facilities are satisfactory ?

- [a] yes
- [b] no

31. Are there any advantages in receiving Islamic banks credit facilities ?

- [a] yes
- [b] no

32. If yes, Is it because it is :

- [a] cheaper than loans
- [b] no collateral needed
- [d] sharing of risk
- [e] others (please specify)

33. If yes, Is it because it is :

- [a] more expensive than loans.
- [b] procedures complicated to understand.
- [c] payment by installment
- [d] others (please specify)

34. If you have any further comments, please add them here ?

Bibliography

- Abbott, J. C., *Agricultural Marketing Enterprises for the Developing World*, Cambridge University Press 1987.
- Abdeen, A. M. and Shook, D. N., *The Saudi Financial System in the Context of Western & Islamic Finance*, John Wiley & Sons, New York, 1984.
- Abdel Ati, H. A., 'The Process of Famine: Causes and Consequences in Sudan', *Development and Change*, Vol.19, No.2, April 1988.
- Abdelkarim, A., *Social Forms of Organization of Labour in the Sudan Gezira*, Discussion paper No.171, School of Development Studies, Norwich, November 1984.
- Abdel-Khalik, A. R. Z., *The Production and Distribution of Milk and Dairy Productions in Egypt. Towards a Co-operative System*, Department of Business Administration, University of Stockholm. 1981.
- Abdu, H., *Agricultural Bank of Sudan*, Khartoum, 1974.
- Adam, F. H. and Apaya, W. A., 'Agricultural Credit in the Gezira', *Sudan Notes and Records*, Vol.LIII, Khartoum, 1972.
- Adewumi, O., 'The Use of the Public Debt Instrument in Nigeria', unpublished Ph.D thesis, University of Edinburgh, 1973.
- Abu Ghudda, A. S., *Mudarabah (or Qiradh) and its Contemporary Implications*, Kuwait, 1983.
- Abu Saud, M., 'Money, Interest and Qirad in Islam', *Studies in Islamic Economics*, Leicester, The Islamic Foundation, 1983.

- Ahmed, A., *Development and Problems of Islamic Banks*, Islamic Research and Training Institute, Islamic Development Bank, Jeddah, Saudi Arabia, 1987.
- Ahmed, K., 'Islam and the Challenge of Economic Development', in *Islam in Transition: Muslim Perspectives*, edited by J.J. Donohue and J.L. Esposito, 1982.
- Ahmed, S. M., 'Banking in Islam', *Journal of Islamic Banking & Finance*, Karachi, Pakistan, Vol.2, No.2, June 1985
- Ahmed, Z., 'Prohibition of Interest in Islam', *Journal of Islamic Banking and Finance*, Karachi, Pakistan, Vol.1, No.1. 1984.
- Ahmed, Z., *Concept and Models of Islamic Banking: an assessment*, Karachi, Pakistan, November 1984.
- Ahmed, Z., 'Some Misgivings about Islamic Free Banking', *Faisal Islamic Bank of Sudan Publication*, English Series 7, Sudan, 1985
- Ali, A. H., 'Finance and Credit', in *The Agricultural Sector of Sudan, Policy and Systems Studies*, Zahlan, A. B. (ed.), Ithaca Press, London, 1986.
- Ali, S. A., 'Sudanese Financial Institutions and Their Functioning', in *Growth Employment and Equity*, Ali Mohamed El-Hassan, (ed.) The International Labour Office in Collaboration with the Economic and Social Research Council, Khartoum University Press, 1977.
- Awad, M. H., 'Dilemmas in Economic Independence Lesson from Sudan', in *Economic Independence in Africa*, Ghai, D. (ed), East Africa Literature Bureau, Nairobi, 1973.

Al-Ani, K. S., 'The Gezira Scheme in the Sudan', unpublished Ph.D dissertation, Columbia University, U.S.A., 1959.

Al-Jahri, M. A., 'A Monetary and Financial Structure for an Interest-Free Economy: Institutions, Mechanisms & Policy', in *Money and Banking in Islam*, Z. Ahmed & other (eds.), International Centre for Research in Islamic Economics, Jeddah, Saudi Arabia, 1983.

Al-Jahri, M. A., *Mudarabah, Principles and Practical Applications*, Islamabad, 1984.

Al-Khartoum Newspaper, Sudan, January 1989.

Amin, S. H., *Islamic Banking and Finance*, Vahid Publication, Iran, 1986.

Ati, H. A., *The Problems of the Agricultural Sector in Sudan: An Account of Policy Gaps*, Development Studies and Research Centre Seminar, Series No. 74, University of Khartoum, November 1986.

Badawi, S., 'Accounting Policies and Procedures', in *Islamic Banking and Finance*, Butterworths Editorial Staff, Butterworths, London, 1986.

Bank of Sudan, twenty eighth annual report, Khartoum, 1987.

Bank of Sudan, *The Credit Ceiling Policy*, Khartoum, November 1986.

Belshaw, H., *Agricultural Credit in Economically Underdeveloped Countries*, FAO Agricultural Studies, No.46, Rome 1959.

Binswanger, Hans and P. Rosenzweig, 'Behaviourial and Material Determinants of Production Relations in Agriculture', *The Journal of Development Studies*, Vol.22, No.3, April 1986.

- Boehm-Bawerk, E., *Capital and Interest, History and Critique of Interest Theories*, Vol. I, Libertarian Press, U.S.A. 1959.
- Bouman, F. J. A. and Houtman, R., 'Pawnbroking as an Instrument of Rural Banking in the Third World', *Economic Development and Cultural Change*, Vol.37, No.1, October 1988.
- Butterfields, S. H., 'Rural Development: Why it is Hard for Developing Country Leadership to Get Started', *International Development Review*, Vol.XIX, part I. 1977.
- Caplovitz, D., *The Poor Pay More, Consumer Practices of Low-Income Families*, The Free Press, New York, 1967.
- Carlson, T., 'Legal Issues & Negotiations', in *Islamic Banking and Finance*, Butterworths Editorial Staff, Butterworths, London, 1986.
- Cassel, G., *The Nature and Necessity of Interest*, London, 1903.
- Chapra, M. U., 'The Nature of Riba in Islam', *Hamdard Islamicus*, Pakistan, Vol. VII, No. 1, 1984.
- Chapra, M. U., 'Money and Banking in an Islamic Economy', in *Monetary and Fiscal Economics of Islam*, Ariff, M. (ed.), International Centre for Research in Islamic Economics, Jeddah, Saudi Arabia, 1982.
- Chapra, M. U., Comments on the Paper of M. M. Metwally, 'The Role of the Stock Exchange in an Islamic Economy', *Journal for Research in Islamic Economics*, Vol. 3, No. 1, Jeddah, 1985.
- Chapra, M. U., *The Islamic Welfare State and its Role in the Economy*, The Islamic Foundation, Leicester, 1979.

- Chapra, M. U., *Towards a Just Monetary System*, The Islamic Foundation, Leicester, 1985.
- Chelliah, R. J., *Fiscal Policy in Underdeveloped Countries*, George Allen & Unwin Ltd., 2nd ed. London, 1969.
- Cline, W. R., *International Debt*, Institute for International Economics, Washington, 1984.
- Darwiche, F., *The Gulf Stock Exchange Crash, The Rise and Fall of the Souq Al-Manakh*, Croom Helm Ltd, Kent, 1986.
- Darwish, A., 'Egypt Swoops on Islamic Banking', *The Independent Newspaper*, London, November 1988.
- De Wilde, J. C., *Experience with Agricultural Development in Tropical Africa*, Vol. 1, Johns Hopkins Press, Maryland, U.S.A. 1967.
- Dillard, D., *The Economics of John Maynard Keynes, Theory of a Monetary Economy*, Crosby Lockwood & Son, London, 1950.
- Doughah, M. A., 'Agricultural Extension: Principles and Constraints', *Agriculture & Development in Western Asia*, Joint Publication of the United Nations Economic and Social Commission for Western Asia and the FAO, No.9, December 1986.
- Due, J. F., *Government Finance*, Third edit. Homewood IL: Richard D, Irwin, Inc., 1963.

- El-Ashker, A. A. F., *The Islamic Business Enterprise*, Croom Helm, Beckenham, Kent, 1987.
- El-Bdour, R. I., 'The Islamic Economic System: A Theoretical and Empirical Analysis of Money and Banking in the Islamic Economic Framework', unpublished Ph.D dissertation, Utah State University, Logan, Utah, U.S.A., 1984.
- El-Hadari, A. E., *The Economics of Agricultural Production in the Private Pump Schemes*, Part II, Research Bulletin No. 15, University of Khartoum, April 1968.
- El-Hassan, A. M., 'The State and the Development of Capitalism in Agriculture in Sudan: The Case of the Savannah Rainland', unpublished Ph.D thesis, University of East Anglia, 1985.
- El-Gousi, A. M., 'Riba, Islamic Law, and Interest', unpublished Ph.D dissertation, Temple University, U.S.A., 1982.
- Elobeid Baseline Survey, *Korag Credit Component*, Report presented to Agricultural Bank of Sudan and USAID by Technoserve, Khartoum, 1987.
- El-Sarraf, M. F., 'Financial Dealings in Islamic Banks', *Journal of Islamic Banking and Finance*, Vol. 1, No. 1, Islamabad, 1984.
- El-Zubeir, E. K., 'The Marketing of Islamic Banking Services with Particular Reference to Faisal Islamic Bank, Sudan', unpublished Ph.D thesis, City University Business School, London, 1984.

- Fama, E. F. & Jensen, M. C., 'Agency Problems and Residual Claims', *Journal of Law and Economics*, Vol.XXVI, June 1983.
- Fitzroy, F. R. and K. Kraft, 'Profitability and Profit-Sharing', *The Journal of Industrial Economics*, Vol.XXXV, No.2, December 1986.
- Food and Agriculture Organization (FAO), *Crop Production, Perspective Study of Agricultural Development for the Democratic Republic of the Sudan*, Rome, 1973.
- Food and Agriculture Organization (FAO), *Fertilizer Programme in the Sudan*, Khartoum, 1983.
- Gadalla, S. M., *Land Reform in Relation to Social Development in Egypt*, University of Missouri Press, Coloumbia, U.S.A., 1962.
- Ghaffar, M. A., 'Interest Free Banking: Problems and Prospects', *Journal of the Institute of Bankers in Pakistan*, Karachi, March 1986.
- Ghifar, N. M. & Muzaffar, M., *Ijara and its Modern Applications*, Islamabad, December 1984.
- Gurley, J. G. and E. S. Shaw, 'Financial Intermediaries and the Savings-Investment Process', *The Journal of Finance*, Vol.XL, No.2, May 1956.
- Habibullah, M., *Some Aspects of Rural Capital Formation in East-Pakistan*, Bureau of Economic Research, Dacca University, Bangladesh, 1963.
- Hamdi, A. R., *Trade and Project Finance, It's Strengths & Weaknesses*, June 1988, London.

- Hansen, A. H., *Fiscal Policy and Business Cycles*, George Allen & Unwin Ltd, London, 1941.
- Harrod, R., *Towards a Dynamic Economics*, London, 1973.
- Harvey, C., *On Reducing the Risk in Foreign Finance for Both*, University of Sussex, Institute of Development Studies, Discussion Paper 167, November 1981.
- Heller, W., 'Fiscal Policies for Underdeveloped Countries', in *Readings in Taxation in Developing Countries*, R. M. Bird & Oldman, O. (eds), (Baltimore: John Hopkins Press), 1967.
- Hessen, R., 'The Modern Corporation and Private Property: A Reappraisal', *Journal of Law and Economics*, Vol.XXVI, June 1983.
- Hill, L. G., 'Hababin Village Economy', *Sudan Notes and Records*, Vol.XLIX, Khartoum, 1968.
- Homoud, S., *Utilization of Funds Generated through Islamic Financial Instruments*, Kuala Lumpur, Malaysia, May 1986.
- Hussain, M. N., 'Studies in the Theory and Practice of IMF Conditionality and Devaluation in Developing Countries', unpublished Ph.D thesis, University of Kent, 1983.
- Ibrahim, A. I., 'Save the Gezira Scheme from Watering Problems', *Al-Khartoum Newspaper*, January 1989.
- Ibrahim, K. M., *The Experience of the Banks and other Sudanese Institutions in Financing Agricultural Projects*, Khartoum, December, 1987.

Integrated Agricultural Credit with other Agricultural Services, National Session on Administrating Agricultural Credit, Khartoum, December 1987.

International Fund For Agricultural Development, annual report, Rome, 1984.

Iqbal, Z. and A. Mirakhor, 'Islamic Banking', *Al-Tawid, A Quarterly Journal of Islamic Thought and Culture*, April-June 1987.

Iqbal, Z. and A. Mirakhor, *Islamic Banking*, Occastional Paper No. 49, IMF, Washington, March 1987.

Iqbal, Z. and A. Mirakhor, *Stabilization and Growth in an Open Islamic Economy*, Islamabad, August 1987.

Irfani, A. M., *Musharakah and its Modern Applications*, Islamabad, December 1984.

Islamic Development Bank, Problem of Investment of Liquid Funds of the Islamic Banks, Jeddah, Saudi Arabia, February 1984.

Islamic Development Bank, eighth annual report, 1982-1983, Jeddah, Saudi Arabia.

Islamic Development Bank, Placement of Liquid Funds of the Islamic Development Bank in Conformity with Shariah, Internal Paper, Jeddah, 1983.

Jansen, Heinz-Gerhard and Koch, W., 'The Rahad Scheme the Agriculture System and its Problem', in *Problems of Agricultural Development in the Sudan*, Gunter Heinritz (Ed.), Selected Papers of a Seminar, Gottingen, Germany, 1982.

- Jones, D. and J. Svejnar, 'Participation, Profit Sharing, Worker Ownership and Efficiency in Italian Producer Cooperative', *Economica*, Vol.52, November 1985.
- Karatash, S. J. and El-Hennawi, M. S., *Islamic Banks: A Challenge for Cooperation*, Islamic Development Bank, Internal paper, Jeddah, February 1984.
- Karsten I., 'Islam and Financial Intermediation', *IMF Staff Papers*, Vol. 29, Washington, 1982.
- Keynes, J. M., *The General Theory of Employment, Interest and Money*, London, 1936.
- Khaleefa, M. U., and Ibrahim, S. E. A., *The Experience of SIB in Musharakah Financing*, Loughborough University of Technology, July 1988.
- Khan, M. A., 'Stock Exchange: Their Functions, and Need for Reform', *The Criterion*, Vo.7, No.1, January, 1972.
- Khan, M. F., 'Islamic Banking as Practised Now in the World', in *Money and Banking in Islam*, Z. Ahmed et al (ed.), Islamabad, 1983.
- Khan, M. H., *The Role of Agriculture in Economic Development, A Case Study for Pakistan*, Centre for Agricultural Publications and Documentation, Wageningen, 1966.
- Khan, W. M., *Towards an Interest-Free Islamic Economic System*, 'The Islamic Foundation, Leicester & International Association for Islamic Economics, Islamabad, 1985.

- Khatkhate, D. R., 'Analytic Basis of the Working of Monetary Policy in Less Developed Countries', *IMF Staff Papers*, Vol.XIX, Washington, 1972.
- Lees, F. A. and Brooks, H. C., *The Economic and Political Development of the Sudan*, The Macmillan Press Ltd, London, 1977.
- Magar, W. Y., 'Farms in the Gezira', in *The Agricultural Sector of Sudan, Policy and Systems Studies*, Zahlan A. B. & Others (eds.), Ithaca Press, London 1986.
- Markings, S. M., *Agricultural Problems of Developing Countries in Africa*, Oxford University Press, Nairobi, 1978.
- Masood, H. M., *Land Tenure System in Islamic Framework*, International Islamic University, Islamabad, Pakistan, May 1985.
- Mathur, I., *Introduction to Financial Management*, Macmillan, New York, 1979.
- Medani, A. I., 'Risk and Uncertainty in Sudan Agriculture', *Sudan Journal of Administration and Development*, Vol.VIII, 1972.
- Meenai, S. A., *The Islamic Development Bank: A Case Study of Islamic Cooperation*, Kegan Paul International, London, 1989.
- Minsky, H., 'Summary of Minsky's Argument', by Joan Robinson in "What are the Questions"?, *Journal of Economic Literature*, Vol.XV, No.4, December 1977.
- Mirakhor, A., 'Analysis of Short-Term Asset Concentration in Islamic Banking', *IMF Working Paper*, Washington, October 1987.

- Mirakhor, A., *Some Theoretical Aspects of an Islamic Financial System*, Iran, June 1986.
- Morss, E. R. and Others, *Strategies for Small Farmer Development*, Vol.I, Westview Press Inc., U.S.A., 1976.
- Mosley P. and Dahal, R. P., 'Lending to the Poorest: Early Lessons from the Small Farmers' Development Programme, Nepal', *Development Policy Review*, Vol.3, No.2, November 1985.
- Mudawi, A. Y., 'The Placing of Medium and Long-Term Finance by Islamic Financial Institutions', in *Islamic Banking & Finance*, Butterworths Editorial Staff, Butterworths, London, 1986.
- Mudawi, A. Y., 'Islamic Banks Problems & Prospects', *Faisal Islamic Bank of Sudan Publication*, English Series, Khartoum, 1984.
- Mudawi, A. Y., 'Revealing the Truth Behind FIBS'? *Arabia*, The Islamic World Review, London, February 1985.
- Nickell, S. J., *The Investment Decisions of Firms*, James Nisbets, England, 1978.
- Nienhaus, V., *Why Islamic Banks Need Top Management: Basic Problems of Islamic Banking in a Capitalistic World and Some Implications*, The International Institute of Islamic Banking, Cairo, August 1981.
- Ogut, A. C. A., 'A New Approach to Fertilizer Use and Food Production in Less Developed Countries', in *Agricultural and Economic Instability*, (edited by) M. Bellamy & B. Greenshields (eds.), International Association of Agricultural Economists, 1987.

- Padmanabhan, K. P., *Rural Credit, Lessons for Rural Bankers and Policy Makers*, Intermediate Technology Publications Ltd, London, 1988.
- Patinkin, D., *Studies in Monetary Economics*, Harper & Row, New York, 1972.
- Patinkin, O., *Money, Interest and Price*, 2nd ed; New York 1965.
- Poostchi, R., *Rural Development and Development Countries*, The Alger Press Ltd, Canada, 1986.
- Qureshi, A. I., *Islam and Theory of Interest*, Lahore, 1946.
- Qureshi, D. M., *The Role of Stock Exchange in Islamic Financial System*, London, June 1988.
- Qureshi, D. M., *The Role of Shariah Based Financial Instruments in a Muslim Country*, Malaysia, May 1986.
- Rahman, F., 'Economic Principles of Islam', *Islamic Studies*, Journal of the Islamic Research Institute, Islamabad, Vol.VIII, No.1. March 1969.
- Rehiman, A. A., 'Evaluation of the Agricultural Bank's Contribution to Different Agricultural Sub-Sector, 1959-1977', unpublished M.Sc. dissertation, University of Khartoum, 1980.
- Robertson, D., *Essay in Monetary Theory*, London, 1946.
- Rolph, E. R., 'Debt Management: Some Theoretical Aspects', *Public Finance*, Vol. 16, 1961.
- Rolph, E. R., 'The Principles of Debt Management', *American Economic Review*, Vol. XLVII, June 1957.

- Salama, A. A., 'Fiscal Policy of an Islamic State', in *Fiscal Policy and Resource Allocation in Islam*, Z. Ahmed et al. (eds.) International Centre for Research in Islamic Economics, Jeddah & Institute of Policy Studies, Islamabad, 1983.
- Salama, A. A., 'Islamic Banks Economic Significance and Methods of Control', *Faisal Islamic Bank Sudan Publication*, Khartoum, English Series 3, 1985.
- Saleh, N. A., *Unlawful Gain and Legitimate Profit in Islamic Law*, Cambridge, London, 1986.
- Samuelson, P., *Economics*, 10th edition, McGraw Hill, New York, 1976.
- Sarap, K., 'Transactions in Rural Credit Markets in Western Orissa, India', *The Journal of Peasant Studies*, Vol.15, No.1, October 1987.
- Shaaeldin, E., 'The Role of the Agricultural Sector in the Economy', in *The Agricultural Sector of Sudan, Policy and System Studies*, Zahlan, A. B. & Magar, W. Y. (eds.), The Abdul Hameed Shoman Foundation, Amman by Ithaca, London, 1986.
- Shaaeldin, E. and Brown, R., 'Towards an Understanding of Islamic Banking in Sudan: The Case of the Faisal Islamic Bank', in *Sudan State, Capital and Transformation*, T. Barnett and A. Abdelkarim (eds.), Croom Helm, London, 1988.
- Sheikh, M. A., 'Interest and Unemployment', *Islamic Studies*, Islamabad, Vol. VIII, No.1, March 1969.

- Siddiqi, M. N., *Banking Without Interest*, Islamic Publications Ltd, Lahore, Pakistan, 1980.
- Siddiqi, M. N., *Partnership and Profit-Sharing in Islamic Law*, The Islamic Foundation, Leicester, 1985.
- Siddiqi, M. N., *Issues in Islamic Banking: Selected Papers*, The Islamic Foundation, Leicester, 1983.
- Siddiqi, M. N., *A Survey of Contemporary Literature on Islamic Economics*, International Conference on Islamic Economics, Mecca, Saudi Arabia, April 1975.
- Simons, H., 'On Debt Policy', *Journal of Political Economy*, Vol.52, December 1944.
- Smith, P., *Essential Business Law of the Family Business*, Sweet & Maxwell, London, 1979.
- Snowden, P. N., 'International Equity Investment in Less Developed Countries Stockmarkets: The Replacement for Bank Lending'? *National Westminster Bank, Quarterly Review*, London, February 1987.
- Standing, G., 'Migration and Modes of Exploitation: Social Origins of Immobility and Mobility', *The Journal of Peasant Studies*, Vol.8, No.2, January 1981.
- Sudan and The World Bank*, Information and Public Affairs Department, Washington, April 1985.

- Taha, A., 'The Role of Sudanese Islamic Bank in Rural Development', *Journal of Islamic Banking*, The International Institute of Islamic Banking, Cairo, No. 54, June 1987. (in Arabic).
- Tobin, J., 'Liquidity Preference as Behaviour Toward Risk', *Review of Economic Studies*, Vol.VVX, 1958.
- The Economist Intelligence Unit, *Sudan, Country Profile*, London, 1988-89.
- The Economist Intelligence Unit, *Sudan, Country Report*, No. 1, 1987.
- The Four Year Salvation, Recovery and Development Programme, 1988/9 - 1991/2, Ministry of Finance and Economic Planning, Khartoum, 1988.
- The Public Institute for Economic Research, *Economic Scene for 1987/1988*, Ministry of Economy and Foreign Trade, Khartoum, July 1988.
- Udovitch, A., *Partnership and Profit in Medieval Islam*, Princeton University Press, 1970.
- (UNDP/IBRD), *Planning Project, Study of Cost of Production and Comparative Advantage of Crops in Sudan*, Khartoum, May 1982.
- Wai, T., 'Interest Rates Outside the Organized Money Markets of Underdeveloped Countries', *IMF Staff Papers*, Vol.VI, 1957-58.
- Walker, C. E., 'Monetary Versus Fiscal Policy', in Mittra, S., *Money and Banking*, Random House, U.S.A., 1970.
- Wilson, R., *Islamic Development Assistance*, University of Bradford, England, October 1988.

- Wohlmuth, K. and Oesterdiekhoff, P. (eds.), *The Development Perspectives of the Democratic Republic of Sudan, The Limits of the Breadbasket Strategy*, Weltforum, Verlag, West Germany, 1983.
- World Bank, *Sudan Agricultural Sector Survey*, Vol.III, Annexes 1-4, 1979.
- World Bank, *Sudan, Investing for Economic Stabilization and Structural Change*, 1982a.
- World Bank, Staff Working Paper, *Monitoring Rural Development in East Asia*, No.439, October 1980.
- World Bank, *Sudan Export Development Study*, Report No.4263, Vol.1, Main Report 1979.
- Zaidi, N. A., 'Islamic Banking and Soft Landings, Letter, Banking World', *The Journal of the Institute of Bankers and the Bankers Magazine*, Pakistan, December 1984.
- Zarqa, M. A., 'Stability in an Interest-Free Islamic Economy: A Note', *Pakistan Journal of Applied Economics*, Vol.II, No.2, Pakistan, 1983.

